

European Techniques 7

PRESCOTT, ARIZONA

Code Analysis

OCCUPANCY	BUSINESS / STORAGE
USE	B / F-1 / S-1
BUILDING AREA	14,680
ALLOWABLE BUILDING AREA	34,000
ALLOWABLE BUILDING HEIGHT	75'
PROPOSED HEIGHT	25'-0"
ALLOWABLE STORIES	3
PROPOSED STORIES	2
CONSTRUCTION TYPE	II-B
FIRE PROTECTION SYSTEMS	FIRE SPRINKLERS AND ALARM
OCCUPANT LOAD	74
EGRESS EXITS REQUIRED	2
EGRESS EXITS PROVIDED	2
OCCUPANCY SEPARATION	0
PARKING REQUIRED	22
PARKING PROVIDED	45

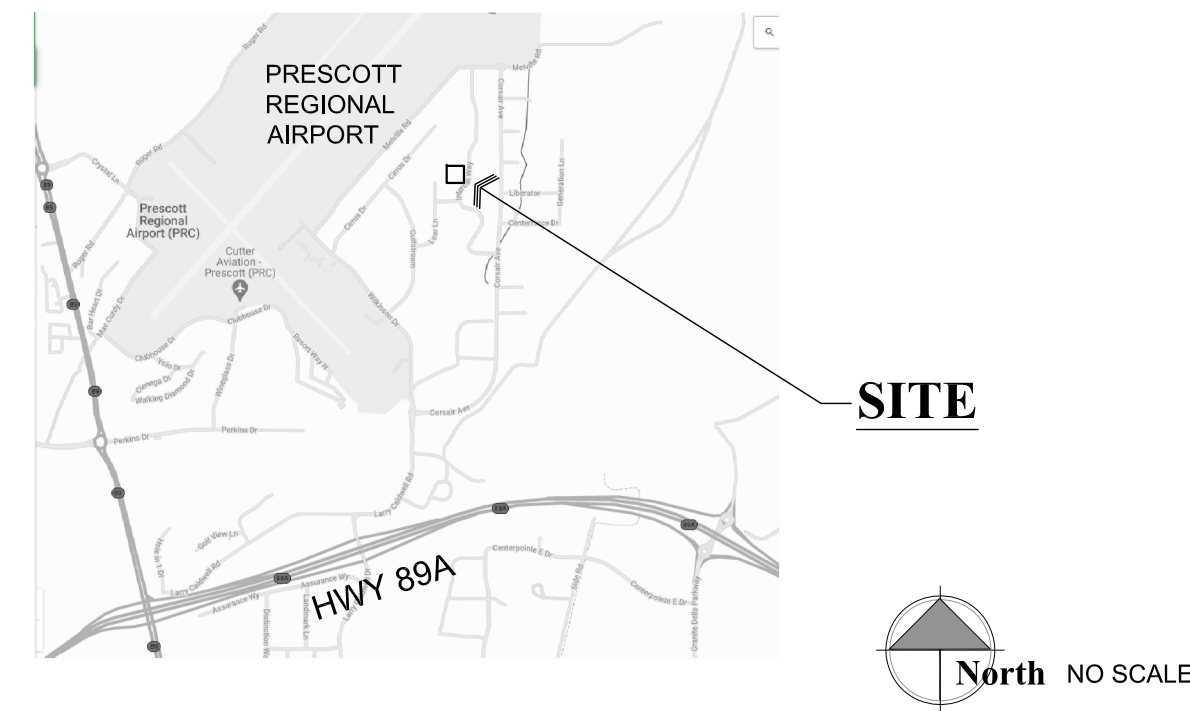
Deferred Submittals

The following items are required and will be provided as a deferred submittal:

- Automatic Fire Sprinkler System.
- Fire Alarm System.

Automatic Fire Sprinkler System & Fire Alarm System submittal documents for deferred submittal shall be submitted to the local fire district, who shall review them and forward them to the building official, with a notation indicating that the deferred submittal documents have been reviewed and that they have been found to be in general conformance with the design of the building. The deferred submittal items shall "NOT" be installed until their design and submittal documents have been approved by the fire marshal having jurisdiction.

Area Map



Project Information

Owner:	Corkery Management L.L.C.
Contact:	Tom Corkery tom@europeantechniques.com
Prepared by:	W. Alan Kenson & Associates, P.C. P.O. Box 11593 Prescott, AZ 86304
Contact:	Alan Kenson, 928-443-5812 wakaarchitect@gmail.com
Jobsite Address:	6686 Inter Cal Way Prescott, AZ
Parcel Number:	103-50-019
Lot Area:	1.29 Acres
Zoning:	IL
Current Code:	2018 International Building Code
Proposed Building :	14,680 S.F., First Floor 1,349 S.F. Second Floor 16,029 S.F. Total
Occupancy:	F-1 / S-1
Construction Type:	Type II-B

Sheet Index

ARCHITECTURAL

CS1	Cover Sheet / Project Information
CS2	Occupancy / Egress and Code Summary
L1.0	Landscape Plan
L1.1	Landscape Details
C-001	Cover
C-002	General Notes
C-003	General Notes
C-101	Grading Plan
C-102	Section Views
C-103	Storm Drain Plan and Profile
C-201	Water, Fire an Sewer Plan
C-202	Fire and Sewer Profiles
C-501	Standard Details
C-502	Standard Details
SW1	Segmental Walls
A1.0	Architectural Site Plan and Partial Utilities Site Plan
A1.1	Site Details
A2.0	First Floor Reference / Wall Types Plan
A2.1	First Floor Dimension Floor Plan
A2.2	Second Floor Reference, Dimension, and High Window Floor plan
A3.0	Building Section
A3.1	Building Section
A3.2	Stair Sections / Details
A4.0	Exterior Elevations
A4.1	Exterior Elevations
A5.0	Reflected Ceiling Plans
A6.0	Roof Plan
A7.0	Interior Elevation
A7.1	Enlarged Plans and Interior Elevations
A8.0	Door and Window Schedule &Types
A8.1	Room Finish Plan, Materials Schedule
A9.0	Details

STRUCTURAL

S1	General Structural Notes
S1.1	Typical Details T-Series
S1.2	Plan Schedules
S2	Foundation Plan
S3	Mezzanine Framing Plan
S3.1	Roof Framing Plan
S3.2	Elevation Plans
S3.3	Elevation Plans
S4	Foundation Details 100 Series
S5	Framing Details 200 Series
S5.1	Framing Details 200 Series

MECHANICAL

M1.1	Mechanical Floor Plan
M1.2	Mechanical Mezzanine Floor Plan
M2.1	Mechanical Schedules
M2.2	Mechanical Specifications
M3.1	Mechanical Details

PLUMBING

P1.1	Plumbing Floor Plan
P1.2	Plumbing Schematics
P1.3	Plumbing Schedules
P1.4	Plumbing Specifications

ELECTRICAL

E1.0	Electrical Symbols, Specifications, One-Line Diagram & Notes
E1.1	Electrical Site Plan
E1.2	Electrical Lighting Floor Plan
E1.3	Electrical Power Floor Plan

Graphic Standards

	EXISTING DOOR		NORTH ARROW INDICATOR
	PROPOSED DOOR		DETAIL DESIGNATOR
	BUILDING SECTION DESIGNATOR		GRID LINE DESIGNATOR
	REVISION DESIGNATOR		ELEVATION DESIGNATOR
	DESCRIPTIVE NOTE DESIGNATOR		ROOM NUMBER / FINISH DESIGNATOR
	DOOR NUMBER DESIGNATOR		DOOR TYPE DESIGNATOR
	WINDOW TYPE DESIGNATOR		WALL TYPE DESIGNATOR

Project Description

EUROPEAN TECHNIQUES INTENDS TO BUILD A 16,029 S.F. BUILDING ON THEIR EXISTING PROPERTY. THERE WILL BE 3 OFFICES, A BREAK ROOM AND RESTROOMS. THE REMAINDER OF THE BUILDING WILL BE USED FOR PARTS ASSEMBLY AND STORAGE.

Architect:

W. Alan Kenson & Associates, P.C.

P 928-443-5812
F 928-443-5815

P.O. Box 11593
Prescott, AZ 86304

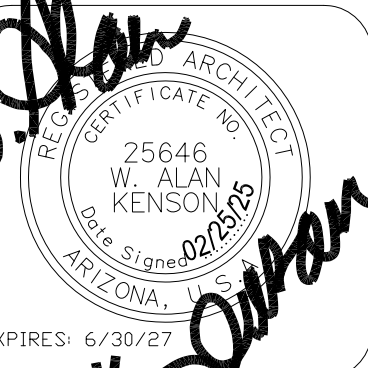
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING



REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



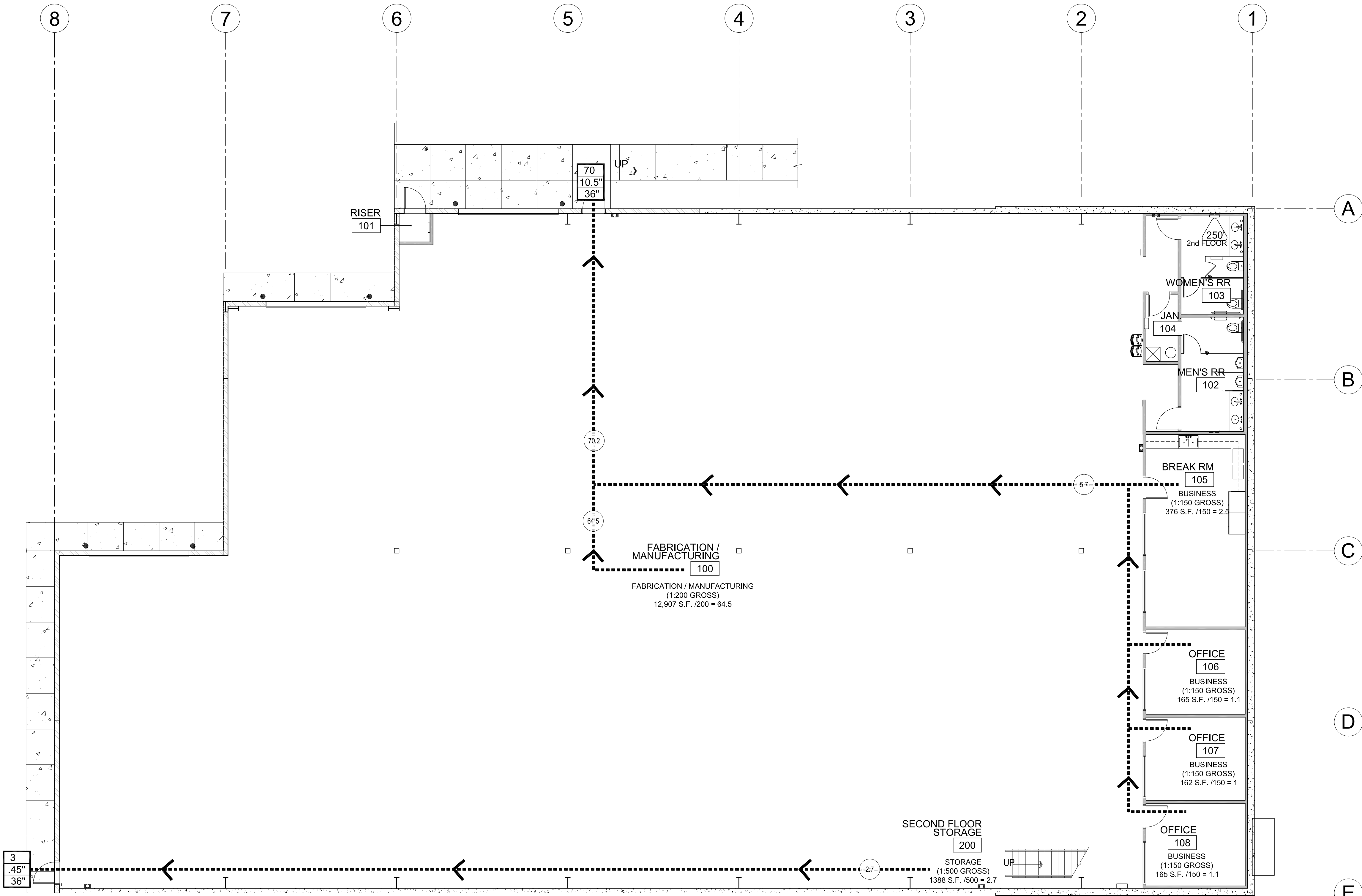
W. Alan Kenson & Associates, P.C.
P 928-443-5812
F 928-443-5815
P.O. Box 11593
Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com
ARCHITECTURE & PLANNING

DRAWING: Cover Sheet
PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ
APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB NO. 803
SHEET

CS1

Feb 25, 2025 - 10:49am



A1 Egress Plan

Plumbing Calculations					
OCCUPANCY CLASSIFICATION	OCCUPANCY COUNT	WATER CLOSETS	LAVATORIES	DRINKING FOUNTAINS	SERVICE SINK
STORAGE	3	.03	.03	1	1
BUSINESS	6	.24	.15		
MANUFACTURING	65	.65	.65		
TOTAL REQUIRED		.92	.83		
TOTAL PROVIDED		3	4	2	1

- ### Accessibility Notes
- ACCESS TO THESE FACILITIES SHALL BE AT PRIMARY ENTRANCES.
 - THE SLOPE OF PUBLIC WALKS SHALL NOT EXCEED A MAXIMUM CROSS SLOPE OF 2%.
 - WALKING SURFACES GREATER THAN 2% SHALL BE SLIP RESISTANT.
 - PROVIDE A 44"x60" MINIMUM LANDING ON THE STRIKE SIDE OF THE ENTRANCE DOOR WITH 44" MINIMUM WIDTH IN THE DIRECTION OF TRAVEL.
 - WALLS SHALL EXTEND 18" TO THE SIDE OF THE STRIKE EDGE OF A DOOR OR GATE THAT SWINGS TOWARDS THE OCCUPANT.
 - RAMPS SHALL HAVE A NON-SLIP SURFACE.
 - RAMPS SHALL BE A MINIMUM OF 36" WIDE.
 - EVERY REQUIRED EXIT DOORWAY SHALL BE SIZED FOR A DOOR NOT LESS THAN 36" WIDE BY NOT LESS THAN 6'-8" HIGH CAPABLE OF OPENING 90 DEGREES AND MOUNTED SO THE CLEAR WIDTH OF THE EXIT WAY IS 32" MINIMUM.
 - THRESHOLDS TO BE A MAXIMUM OF 1/4" ABOVE ADJACENT FLOOR FINISH. ONE-HALF INCH THRESHOLD MAY BE USED IF BEVELED PER A.D.A. STANDARDS.
 - MAXIMUM EFFORT TO OPERATE A DOOR SHALL NOT EXCEED 5 POUNDS.
 - THE BOTTOM 10 INCHES OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING DOORS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE.
 - PROVIDE LEVER TYPE HARDWARE, PANIC BARS, PUSH AND PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE. (30" TO 44" A.F.F.)

Egress Legend:

	EXIT ACCESS
	ACCESSORY USE (NO OCCUPANCY)
	ROOM OCCUPANCY LOAD
	SUBTOTAL OCCUPANCY LOAD
	OCCUPANCY TOTAL
	REQUIRED EXIT WIDTH (FACTOR = 0.15)
	PROVIDED EXIT WIDTH
	WORST CASE TRAVEL DISTANCE
<u>FUNCTION OF SPACE</u>	
<u>OCCUPANT LOAD FACTOR</u>	
FABRICATION / MANUFACTURING	200 GROSS
OFFICE	150 GROSS
STORAGE	500 GROSS

Occupant load

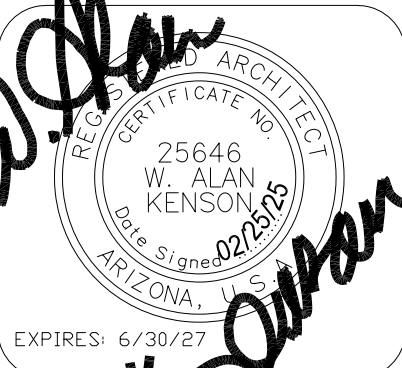
NOTE:
GROSS SQUARE FOOTAGE LISTED BELOW DOES NOT INCLUDE ACCESSORY AREAS.

FABRICATION / MANUFACTURING	12,907 SQ. FT.	65 OCCUPANTS
OFFICE AREA	868 SQ. FT.	6 OCCUPANTS
STORAGE	1,388 SQ. FT.	3 OCCUPANTS
TOTAL:	15,163 SQ. FT.	74 OCCUPANTS

- ### EXIT SIGNS:
- PROVIDE A 6"x9" BLUE TACTILE, BRAILLE, 'EXIT' SIGN AS MANUFACTURED BY 'SIMPLY EXIT SIGNS (#SE-1980)' OR EQUAL COMPLYING WITH ICC/ANSI A117.1 SECTION 703.1 AND IBC 1013 & SECTION 1111, ADJACENT TO EACH DOOR TO AN EXIT PASSAGEWAY AND THE EXIT DISCHARGE.

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

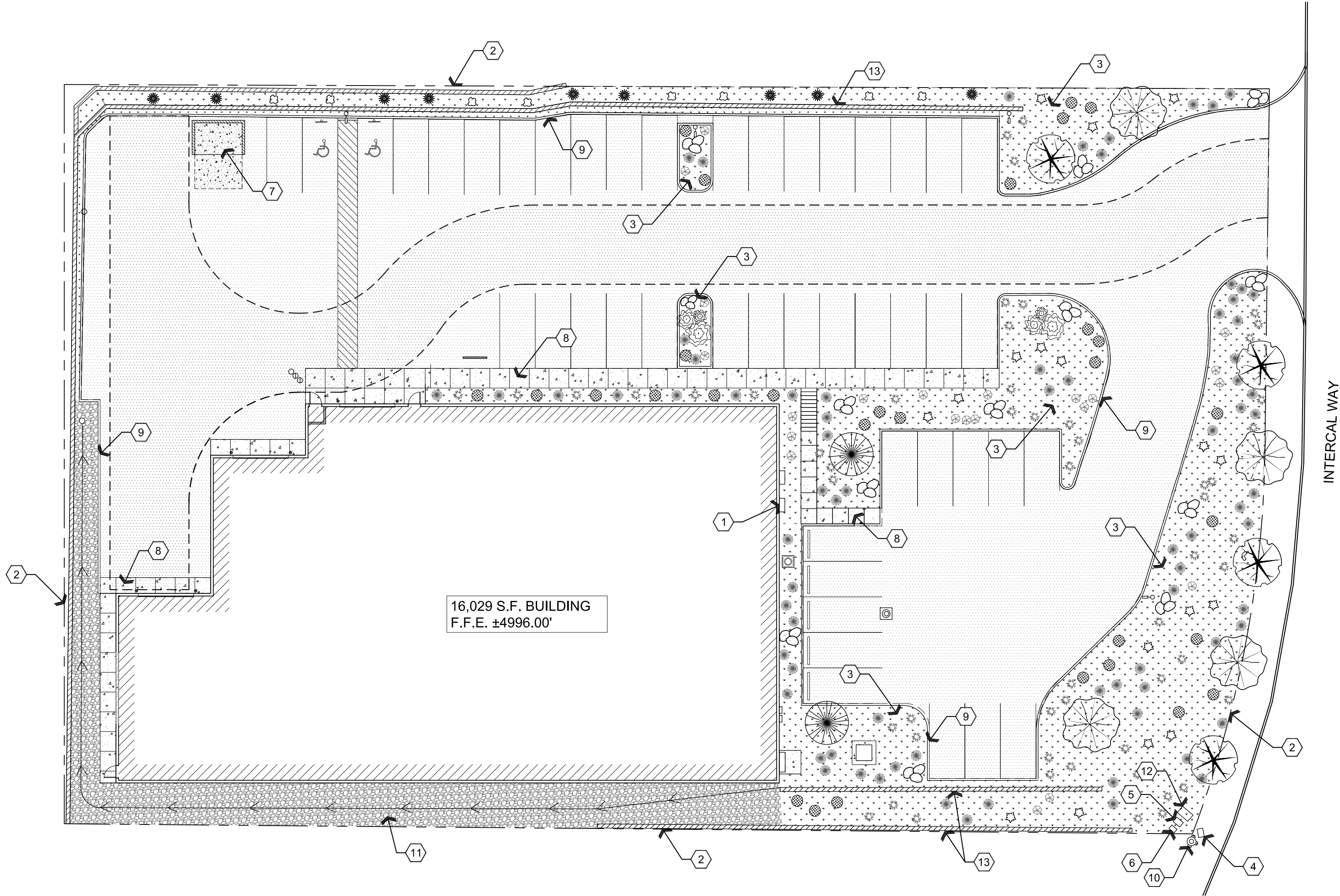
DRAWING: Occupancy / Egress Plan and Code Summary

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB. NO. 803
SHEET

CS2



A1 Landscape Plan

Descriptive Keynotes

1. PROVIDE LANDSCAPE TIMER.
2. PROPERTY LINE.
3. LANDSCAPE AREA. PROVIDE GROUND COVER. REFER TO PLANT SCHEDULE NOTES.
4. DOMESTIC SERVICE WATER METER IN YARD BOX. REFER TO CIVIL PLANS.
5. BACKFLOW PREVENTOR FOR LANDSCAPE IRRIGATION SYSTEM. PROVIDE ASSE 1060 COMPLIANT FREEZE RESISTANT 'FAKE ROCK' COVER BOLTED TO CONCRETE SLAB. PROVIDE 120V DEDICATED ELECTRICAL CIRCUIT WITH WEATHERPROOF GFCI DUPLEX OUTLET WITHIN ENCLOSURE. REFER TO CIVIL AND ELECTRICAL PLANS PLANS.
6. 3/4" VALVED SCHEDULE 40 PVC STUB-OUT IN BELOW GRADE YARD BOX FOR LANDSCAPE IRRIGATION SYSTEM. REFER TO CIVIL PLANS.
7. DUMPSTER LOCATION. REFER TO ARCHITECTURAL SITE PLAN.
8. CONCRETE PAVEMENT / SLAB, REFER TO CIVIL PLANS.
9. CONCRETE CURB. REFER TO CIVIL PLANS.
10. EXISTING FIRE HYDRANT.
11. PROVIDE RIP RAP. REFER TO CIVIL PLANS.
12. PROVIDE REDUCED PRESSURE BACKFLOW PREVENTION DEVICE IN ASSE HOT BOX.
13. SEGMENTAL WALL, REFER TO CIVIL PLANS.

Plant Schedule

SYMBOL	SIZE	QUANTITY	COMMON NAME / SCIENTIFIC NAME
☁	2' - 3'	13	BOULDER CLUSTER
☼	1 GAL	55	DEER GRASS
☼	1 GAL	22	NANDINA
☼	1 GAL	77	BLUE PFITZER JUNIPER
☼	1 GAL	30	SPIREA
☼	1 GAL	9	HALLS HONEYSUCKLE
☼	1 GAL	8	COTONEASTER
☼	1 GAL	17	RUSSIAN SAGE
☼	15 GAL	2	CLUMP ASPEN
☼	15 GAL	2	LEYLAND CYPRESS
☼	15 GAL	4	OKLAHOMA REDBUD
☼	15 GAL	4	DEODAR CEDAR

LANDSCAPED AREAS:
150 LINEAR FEET OF STREET FRONTAGE
1 TREE PER 25 LINEAR FEET REQUIRED (6)
TOTAL TREES PROVIDED: 12
4,050 SQ. FT. OF STREET FRONTAGE LANDSCAPED
4 SHRUBS PER 250 SQ. FT. REQUIRED (65)
TOTAL SHRUBS PROVIDED: 80 ALONG FRONTAGE

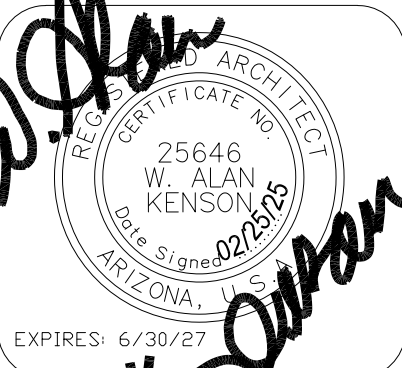
- NOTES:
1. LANDSCAPE PLANTINGS SHALL BE WATERED VIA DRIP IRRIGATION SYSTEM ON LANDSCAPE TIME CLOCK.
 2. PROVIDE BACKFLOW PREVENTOR FOR DRIP IRRIGATION SYSTEM.
 3. SPRAY ALL GROUND COVER AREAS W/ PRE-EMERGENT FOR WEED CONTROL.
 4. PROVIDE WEED BARRIER IN ALL PLANTER AREAS.
 5. GROUND COVER IN ALL PLANTER AREAS SHALL BE 3/4" COLORED ROCK. WHERE SLOPES ARE TOO STEEP, PROVIDE 2" - 3" FRACTURED RIP RAP OF MATCHING COLOR.
 6. REFER TO CIVIL PLANS FOR GRADING AND DRAINAGE.
 7. REFER TO LANDSCAPE DETAILS ON SHEET L1.1.

Legend

	LANDSCAPE AREA
	ABC OVER SUBGRADE
	CONCRETE
	RIP RAP

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Landscape Plan

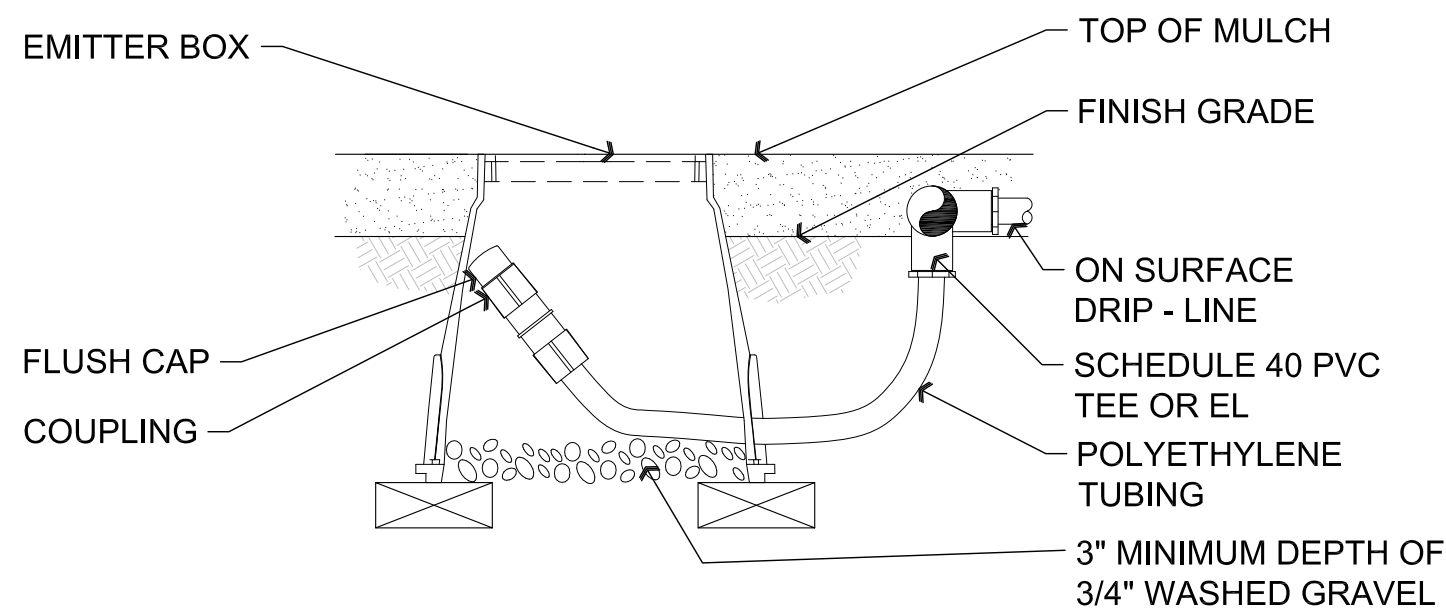
PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB NO. 803
SHEET

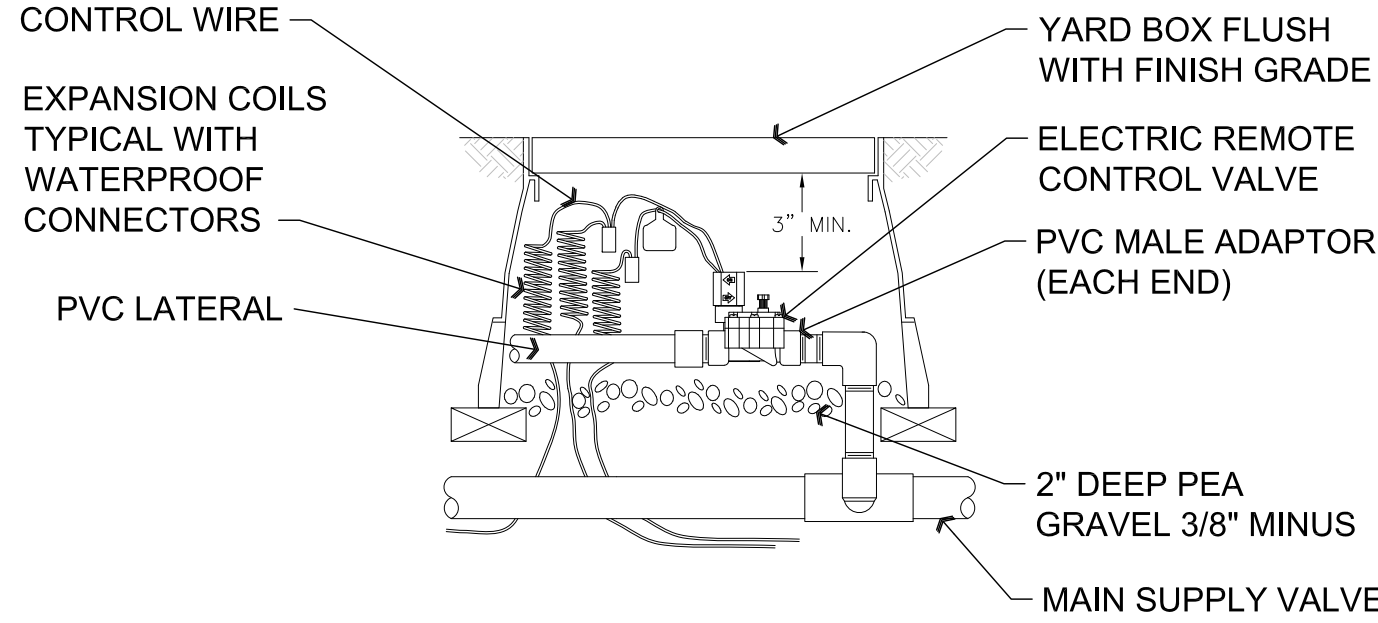
L1.0

Feb 24, 2023 - 10:51am



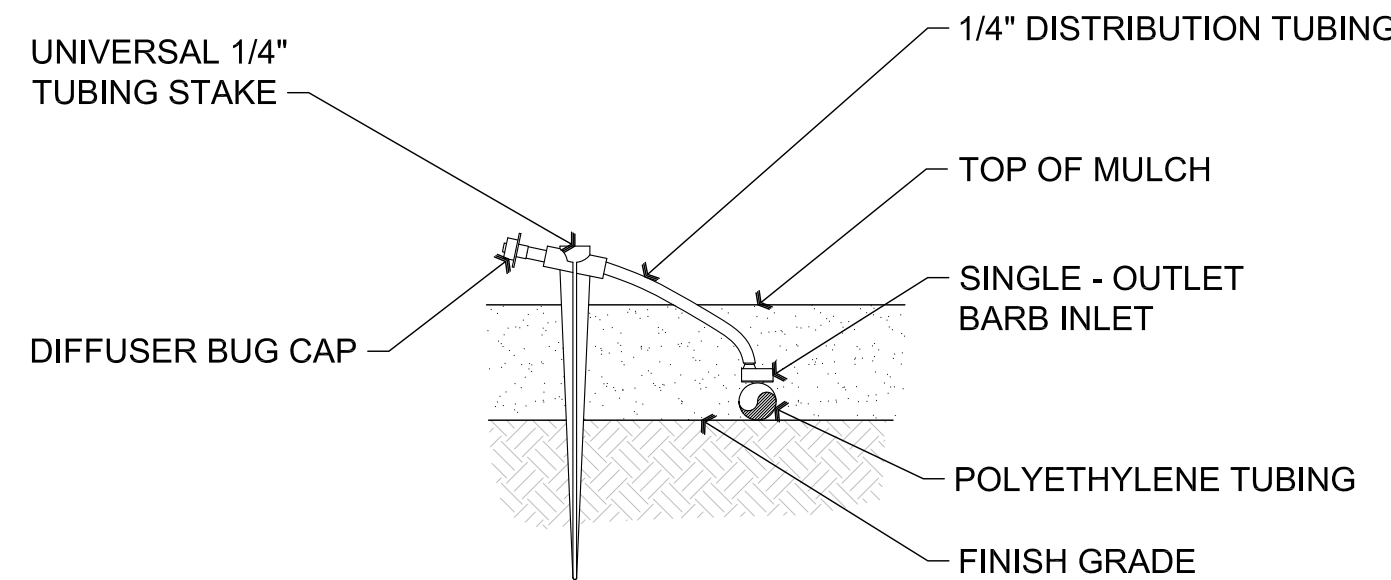
NOTE: ALLOW A MINIMUM 6" OF DRIP - LINE TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

A4 Typical Drip Line Flush Box



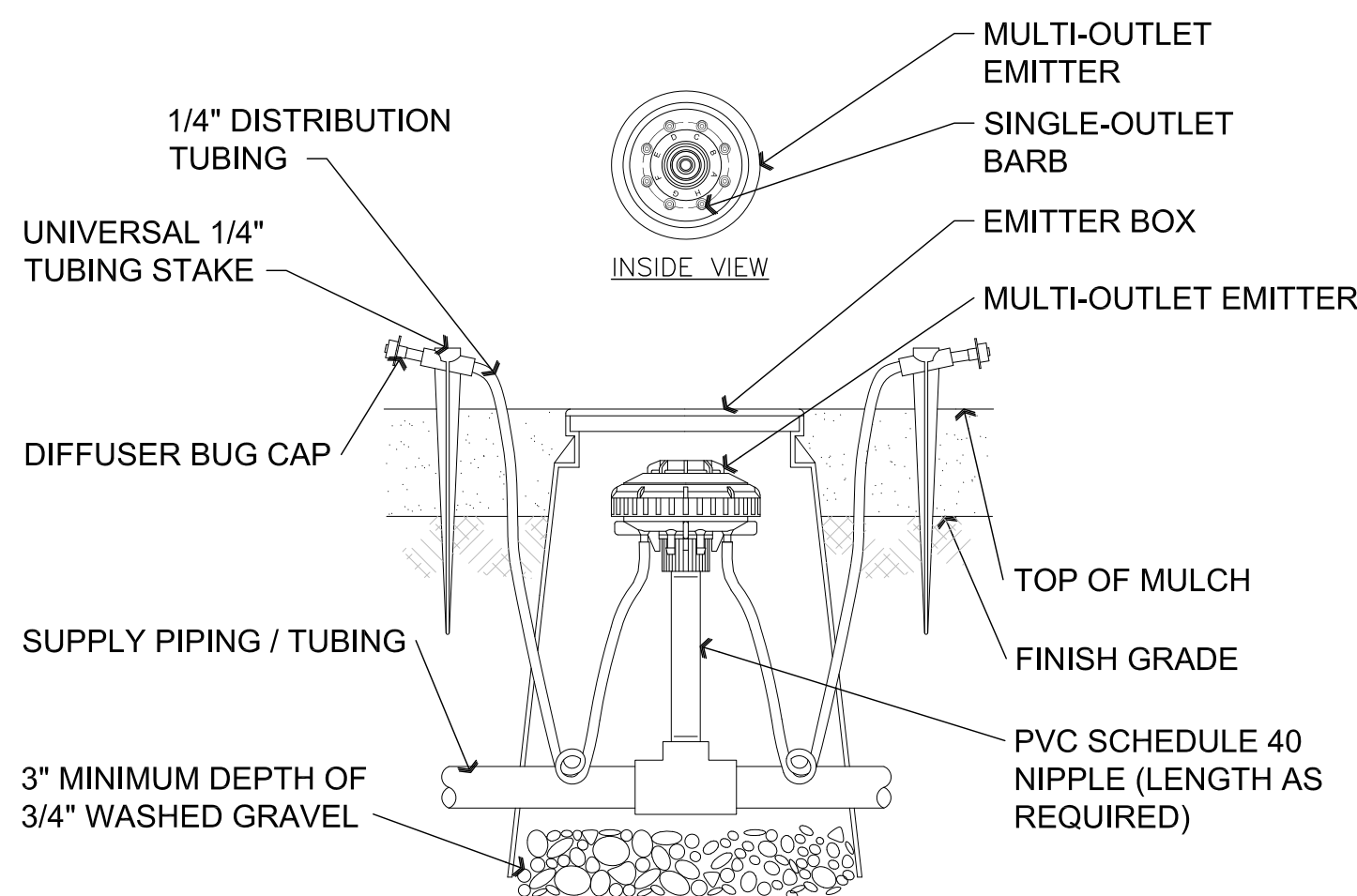
NOTE: SEAL ALL THREADED JOINTS / FITTINGS WITH APPROVED SEALANT PRIOR TO ASSEMBLY

B4 Typical Electric Remote Control Valve



NOTE: FOR SLOPED CONDITIONS PLACE DISTRIBUTION POINT AT THE HIGH POINT OF THE PLANTING WELL.

B3 Typical Single - Port Emitter

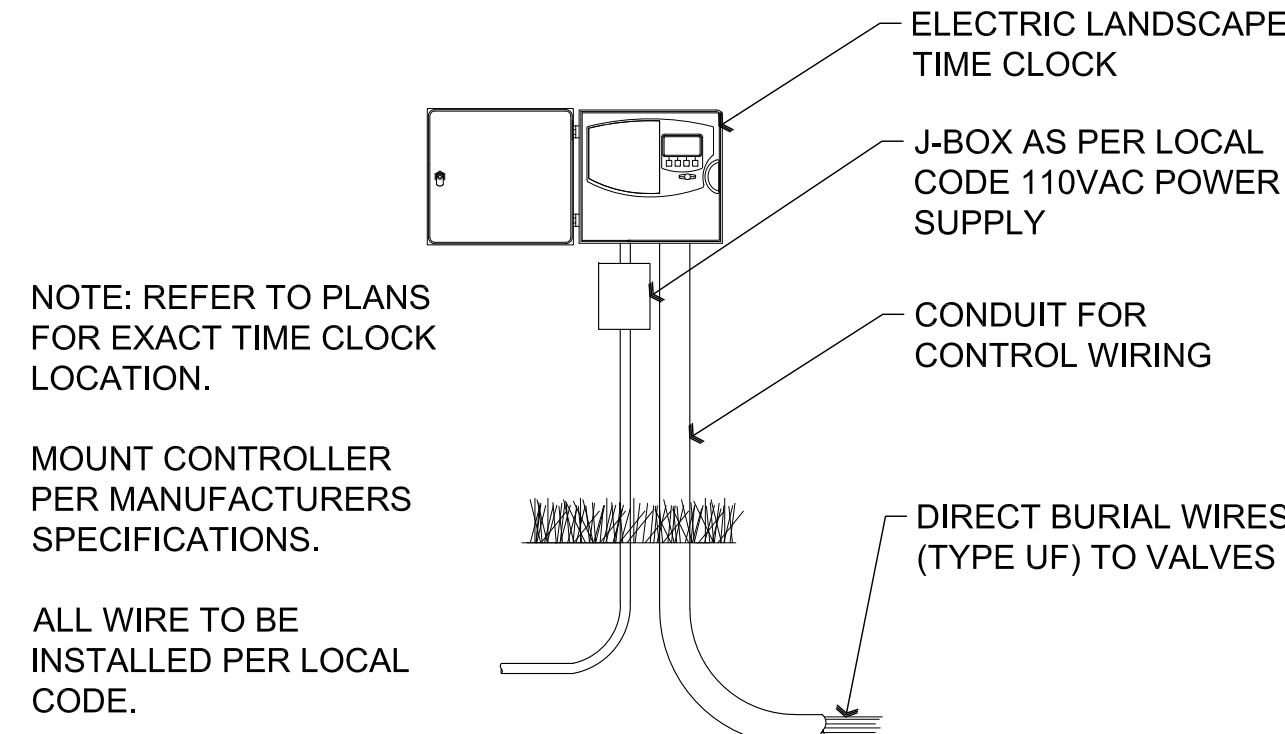


NOTE: COIL ADDITIONAL 9" OF TUBING IN EMITTER BOX TO FACILITATE MAINTENANCE.

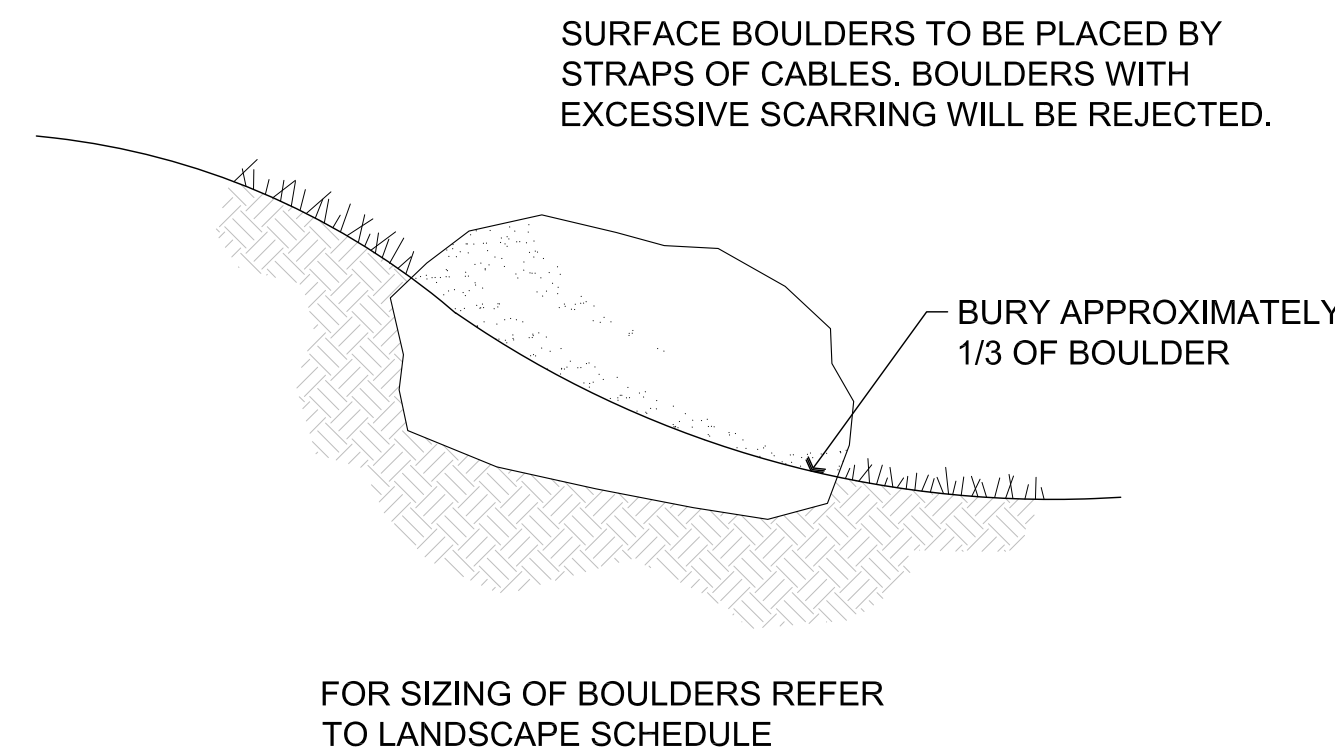
INSTALL A MINIMUM OF (1) MULTI-PORT EMITTER PER TREE - EQUALLY SPACED AROUND DRIP LINE OF TREE CANOPY TYPICAL. OPEN ADDITIONAL PORTS AND INSTALL SPAGHETTI DISTRIBUTION TUBING TO PROVIDE ADEQUATE WATER AS TREE MATURES, (TYP.)

FOR SLOPED CONDITIONS PLACE DISTRIBUTION POINT AT THE HIGH POINT OF PLANTING WELL.

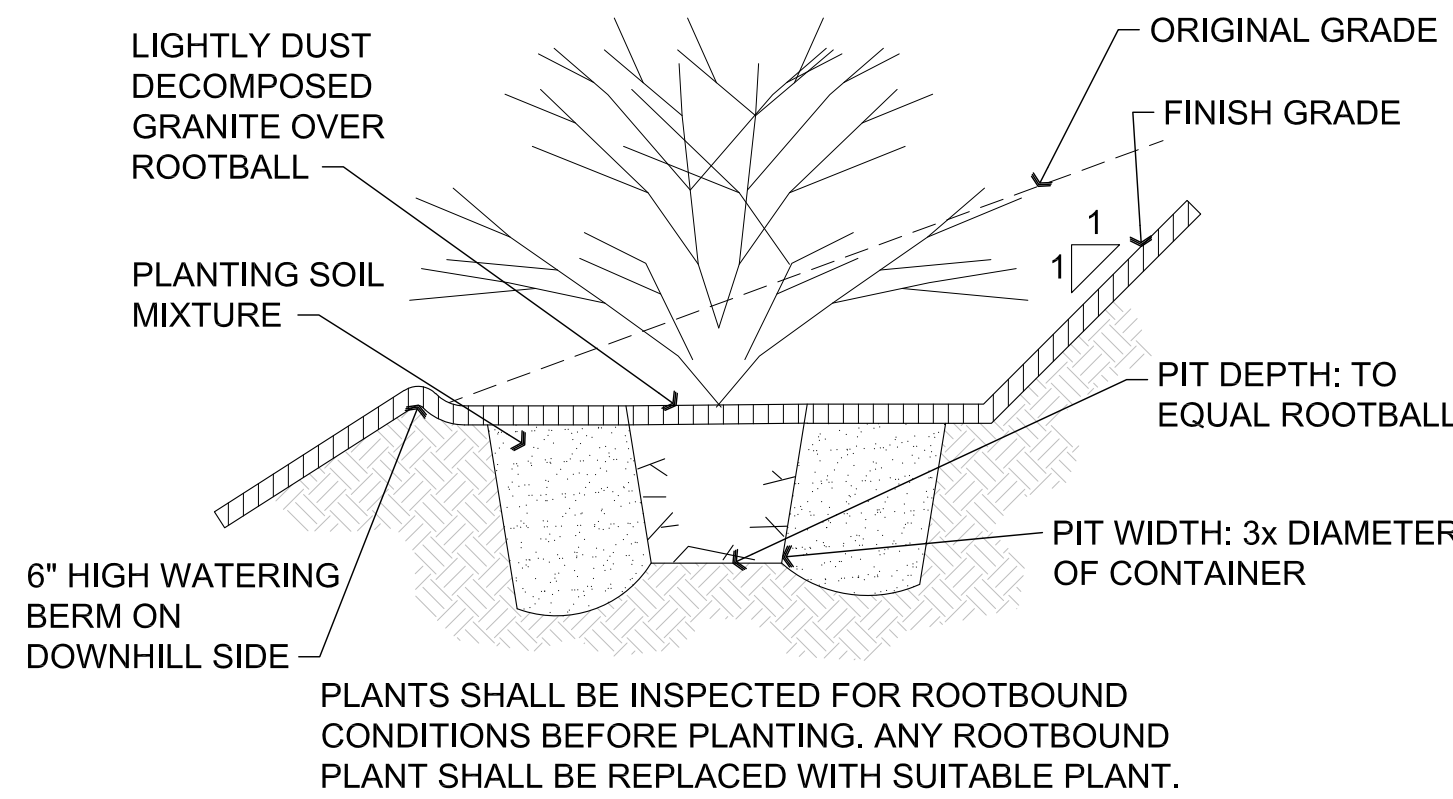
B1 Typical Multi - Port Emitter



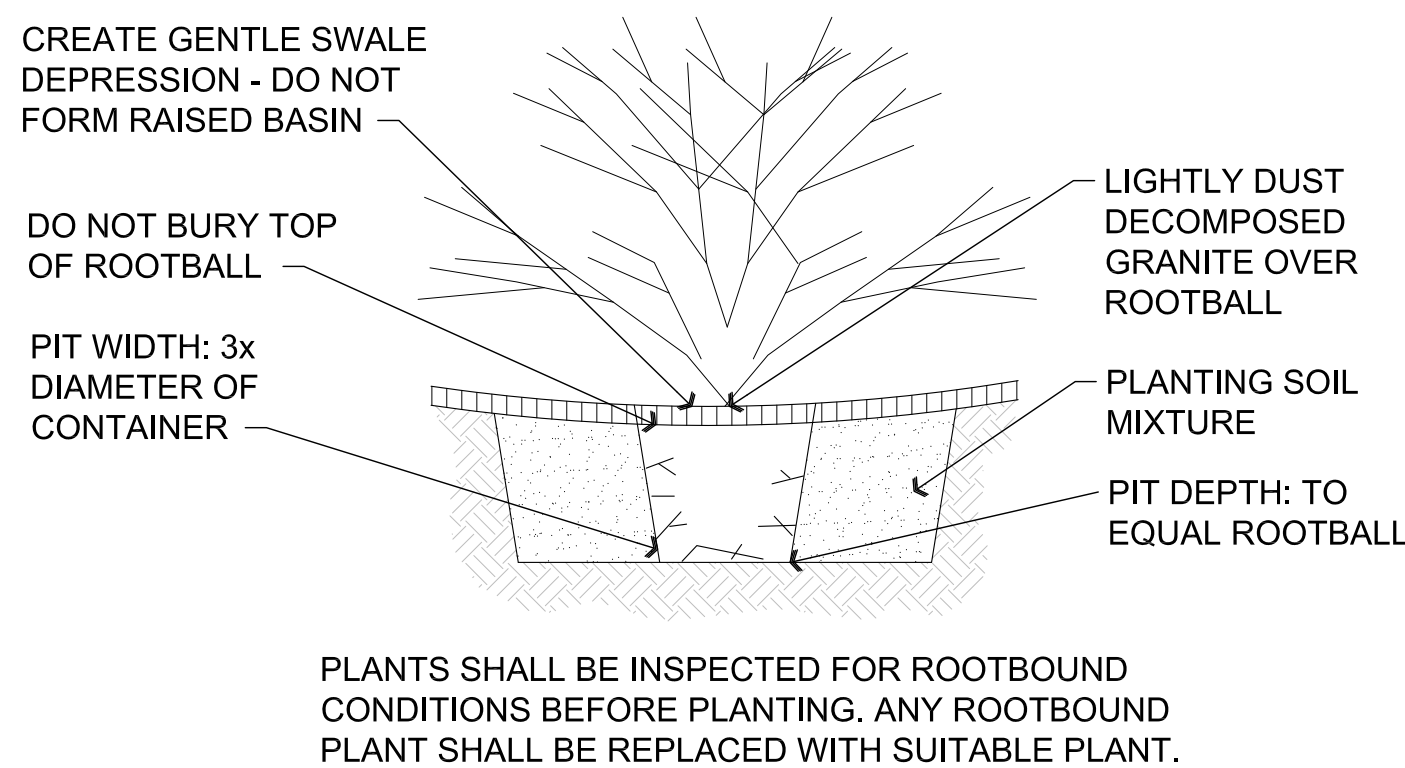
C4 Typical Electric Landscape Time Clock



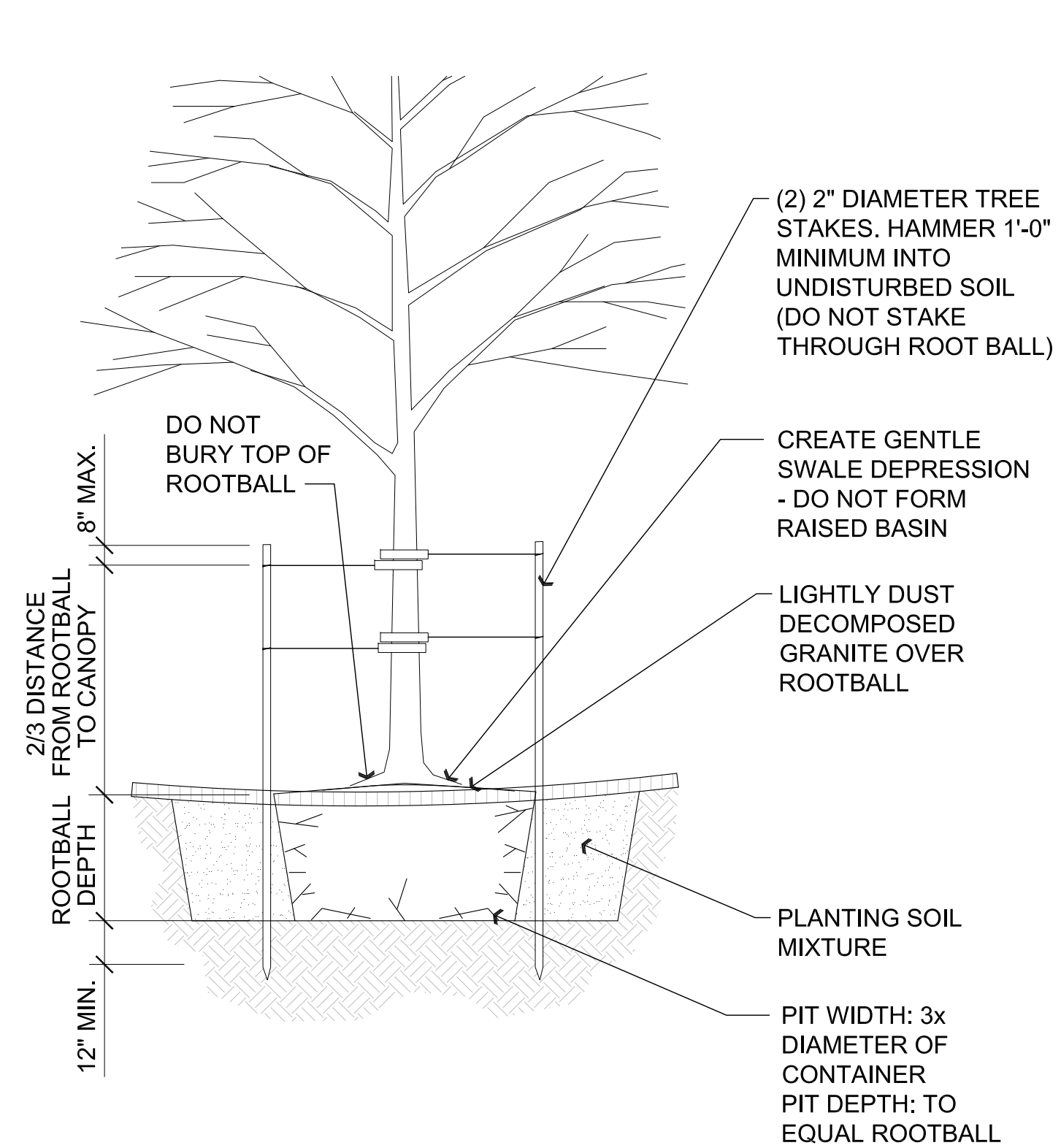
C3 Typical Boulder Detail



C2 Typical Shrub Planting on Slope



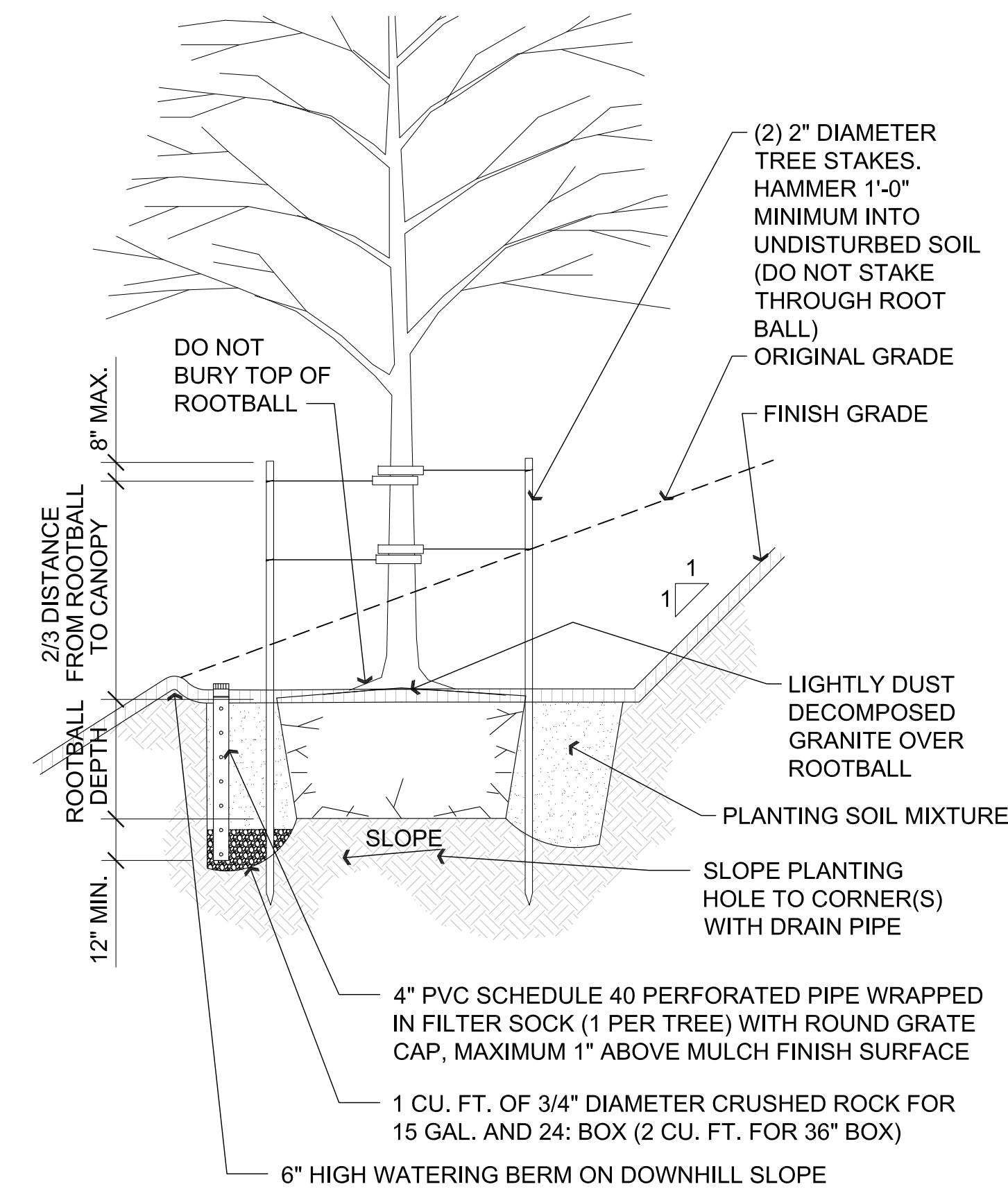
C1 Typical Shrub Planting



NOTE: STAKE TREE PERPENDICULAR TO DIRECTION OF PREVAILING WIND.

PLANTS SHALL BE INSPECTED FOR ROOTBOUND CONDITIONS BEFORE PLANTING. ANY ROOTBOUND PLANT SHALL BE REPLACED WITH SUITABLE PLANT.

D3 Typical Tree Planting



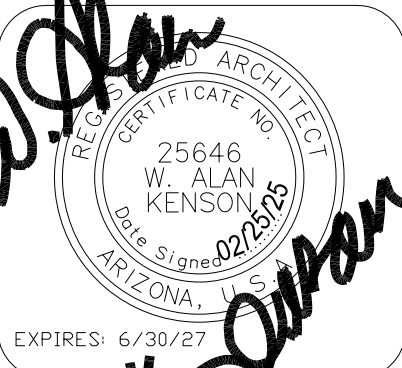
NOTE: STAKE TREE PERPENDICULAR TO DIRECTION OF PREVAILING WIND.

PLANTS SHALL BE INSPECTED FOR ROOTBOUND CONDITIONS BEFORE PLANTING. ANY ROOTBOUND PLANT SHALL BE REPLACED WITH SUITABLE PLANT.

D1 Typical Tree Planting on Slope

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812
F 928-443-5815
P.O. Box 11593
Prescott, AZ 86304

email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Landscape Details

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB NO. 803
SHEET

L1.1

PER THE QUIT CLAIM RECORDED IN INSTRUMENT 2016-0027005 IN THE OFFICE OF THE YAVAPAI COUNTY RECORDER, THE OWNER OF THE PARCEL SHOWN HEREON IS CORKERY MANAGEMENT, LLC, AN ARIZONA LIMITED LIABILITY COMPANY.

THIS MAP DOES NOT REPRESENT A LAND BOUNDARY SURVEY. THE BOUNDARY LINES, AS SHOWN, ARE BASED UPON THE PLAT RECORDED IN BOOK 51 OF MAPS AND PLATS AT PAGE 8, RECORDS OF THE YAVAPAI COUNTY RECORDER AND LOT CORNER MONUMENTS FOUND IN THE FIELD.

UTILITIES AS SHOWN HEREON ARE BASED ON PHYSICALLY APPARENT ABOVE
GROUND UTILITY APPURTENANCES AND LIMITED UTILITY LOCATE MARKINGS.

THE HORIZONTAL AND VERTICAL DATUM FOR THIS SURVEY IS THE CITY OF
PRESCOTT SURVEY DATUM.

PROJECT BENCH MARK:
DATUM: NAVD-88 (CITY OF PRESCOTT SURVEY DATUM)

SEE THE SITE BENCHMARK PLOTTED HEREON

THE MEASURED BEARINGS AS SHOWN HEREON ARE BASED ON THE CITY OF PRESCOTT'S SURVEY DATUM. ANY MONUMENTED LINE SHOWN HEREON MAY BE UTILIZED AS A LOCAL BASIS OF BEARING. THE CITY OF PRESCOTT SURVEY DATUM IS ON FILE WITH THE CITY OF PRESCOTT PUBLIC WORKS DEPARTMENT AND PUBLISHED ON THE CITY OF PRESCOTT WEBSITE AT WWW.PRESCOTT-AZ.GOV.

PER FEMA FIRM PANEL 04025C1693H DATED 03/06/2018,
SUBJECT PROPERTY LIES IN ZONE X.

THESE PLANS WERE PREPARED UNDER THE DIRECTION OF GARY R. KELLEY, PE 22880 AND CHRISTOPHER J. KIMBALL, RLS 48100.

THE TOPOGRAPHIC INFORMATION SHOWN HEREON IS PER
A TOPOGRAPHIC SURVEY PERFORMED BY GRANITE BASIN
ENGINEERING.

	FIRE HYDRANT
	WATER VALVE
	WATER METER BOX
	RPZ ASSEMBLY
	SEWER CLEANOUT
	SEWER BACKWATER VALVE
	SANITARY SEWER MANHOLE
	EXISTING TREE
	EXISTING LIGHT
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING POWER POLE

_____ 8" S _____	SEWER LINE (SIZE AS NOTED)
_____ 8" W _____	WATER LINE (SIZE AS NOTED)
_____ G _____	GAS LINE
_____ E _____	ELECTRIC LINE
_____ OHE _____	OVERHEAD ELECTRIC LINE
_____ T _____	TELEPHONE LINE
_____ 4" F _____	FIRE LINE (SIZE AS NOTED)
_____ (4965) _____	DESIGN FINISH GRADE
-----4965-----	EXISTING GRADE CONTOUR

[---	---]	DENOTES RECORD DIMENSION
—5470—	—	EXISTING GRADE CONTOUR BY THIS SURVEY. (NAVD-88)
ADOT		ARIZONA DEPARTMENT OF TRANSPORTATION
APN.		ASSESSOR'S PARCEL NUMBER
BK.		BOOK
BWV		BACK WATER VALVE
EL. OR ELEV.		ELEVATION
EX.		EXISTING
FIR		FOUND IRON REBAR
L.S.		LAND SURVEYS
M.P.		MAPS AND PLATS
PG.		PAGE
PRV		PRESSURE REDUCING VALVE
PUE		PUBLIC UTILITY EASEMENT
ROW		RIGHT OF WAY
RPZ		REDUCED PRESSURE ZONE ASSEMBLY
SCO		SEWER CLEAN OUT
SOV		SHUT-OFF VALVE
SS MH		SANITARY SEWER MANHOLE
Y.C.R.O.		YAVAPAI COUNTY RECORDER OFFICE

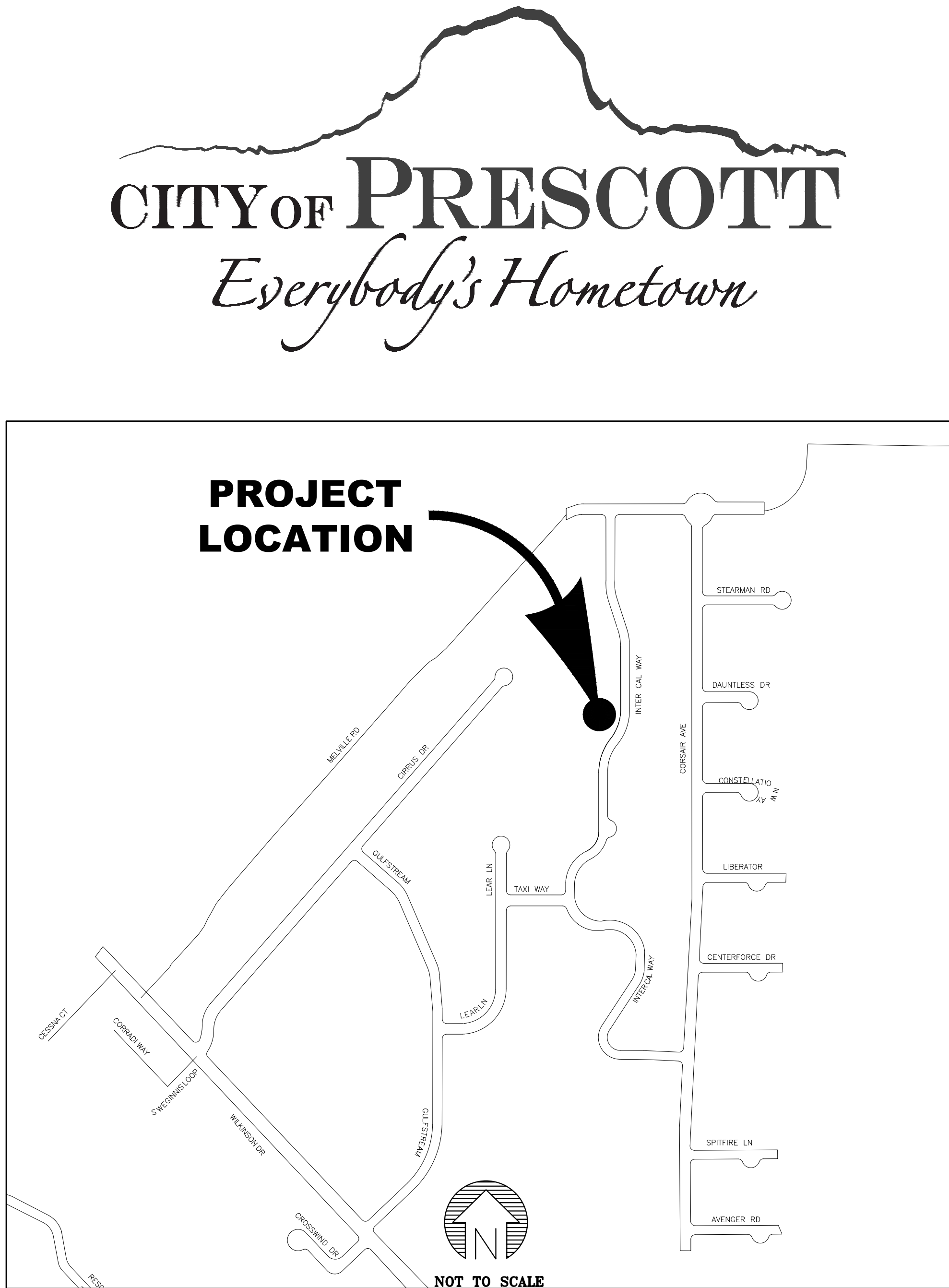
THE CITY OF PRESCOTT STANDARD DETAILS AND SPECIFICATIONS MEET MINIMUM DESIGN REQUIREMENTS OF THE EQUIVALENT MAG SPECIFICATIONS AND STANDARD DETAILS.

APPROVED TRAFFIC CONTROL PLAN AND R.O.W. PERMIT
MUST BE OBTAINED FROM PUBLIC WORKS PRIOR TO
BEGINNING WORK IN THE R.O.W.

BOC	BACK OF CURB
EC	EXISTING CONCRETE ELEVATION
EG	EXISTING GROUND ELEVATION
EP	EXISTING PAVEMENT
ETC	EXISTING TOP OF CURB
EX	EXISTING
FC	NEW FINISHED CONCRETE ELEVATION
FF	NEW FINISHED FLOOR ELEVATION
FG	NEW FINISHED GRADE ELEVATION
FL	NEW FLOWLINE ELEVATION
G/B	GRADE BREAK
H/P	HIGH POINT
INV	INVERT
L/P	LOW POINT
P	PAVEMENT OR FINISHED SURFACE
PUE	PUBLIC UTILITY EASEMENT
ROW	RIGHT-OF-WAY
TC	NEW TOP OF CURB ELEVATION
TY	TYPICAL
TW	NEW TOP OF WALL ELEVATION
WM	WATER METER

APN: 103-50-019
6686 INTER CAL WAY

LOT 47 PRESCOTT AIRPARK UNIT SEVEN
PER BK. 51 MAPS AND PLATS, PG. 8, Y.C.R.O.
A PORTION OF SECTION 25, T15N, R2W
AND SECTION 30, T15N, R1W,
GILA AND SALT RIVER MERIDIAN,
YAVAPAI COUNTY, ARIZONA



PROJECT VICINITY MAP

COMPANY	CONTACT	TELEPHONE
ARIZONA PUBLIC SERVICE CO. 6675 MONSIEUR AVE PRESCOTT, ARIZONA 86301	MICHELLE CURLEY	(928)443-6697
CENTURYLINK 1445 MASONRY WAY PRESCOTT, ARIZONA 86301	DELL HOWARD	(520)838-3050
UNISOURCE GAS CO. 6405 WILKINSON DRIVE PRESCOTT, ARIZONA 86301	JEFF BROWN	(928)771-7226
SPARKLIGHT 3801 TOWER RD. PRESCOTT, ARIZONA 86301	DOUG HAMILTON	(928)910-3096
CITY OF PRESCOTT UTILITIES 433 NORTH VIRGINIA ST. PRESCOTT, ARIZONA 86301	STEVE OLFERS	(928)777-1130

BLUE STAKE CALL TWO
WORKING DAYS BEFORE
YOU DIG
1-800-STAKE-IT
outside Maricopa County

CALL TWO WORKING
DAYS BEFORE YOU DIG
1-800-STAKE-IT
1-800-782-5348
(OUTSIDE MARICOPA COUNTY)

NOTE:
CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF
EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR
IS RESPONSIBLE FOR COORDINATING ANY NECESSARY UTILITY
RELOCATION WITH THE APPLICABLE UTILITY.

SHEET NO.	SHEET	DESCRIPTION
1	C-001	COVER
2-3	C-002-003	GENERAL NOTES
4	C-101	GRADING PLAN
5	C-102	SECTION VIEWS
6	C-103	STORM DRAIN PLAN AND PROFILE
7	C-201	WATER, FIRE, AND SEWER PLAN
8	C-202	FIRE AND SEWER PROFILES
9-10	C-501-502	STANDARD DETAILS

I HEREBY CERTIFY, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THIS PROJECT HAS BEEN COMPLETED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS, SPECIFICATIONS AND REFERENCED STANDARDS, EXCEPT AS SHOWN HEREON; THAT THESE AS-BUILT PLANS REFLECT THE POSITION OF CONSTRUCTED IMPROVEMENTS BASED ON FIELD MEASUREMENTS; AND THAT THE MATERIALS USED IN CONSTRUCTION ARE AS SHOWN BASED ON FIELD OBSERVATION AND TEST RESULTS.

THIS CERTIFICATION DOES NOT WARRANT MATERIALS, WORKMANSHIP, METHODS OF CONSTRUCTION, OR OTHER ITEMS AFFECTING THE WARRANTY OF THIS PROJECT, TO THE CITY OF PRESCOTT. USERS OF THIS INFORMATION ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ACTUAL CONDITIONS.

REGISTERED PROFESSIONAL ENGINEER (CIVIL) _____ DATE _____

	DRAWN	ZAJ	EUROPEAN TECHNIQUES 7 APN: 103-50-019 6686 INTER CAL WAY PRESCOTT, AZ COVER	KELLEY/WISE ENGINEERING, INC. 146 GROVE AVENUE PRESCOTT, ARIZONA 86301 (928) 771-1730 FAX 778-2220 gkelley@kelley-wise.com				CALL THE WRITING DAYS BEFORE YOU BID (602) 283-1100 1-800-5TAKE-IT (OUTSIDE MARICOPA COUNTY)			
	DESIGN	ZAJ		NO.	REVISION	DATE					
	CHECK	GRK									
	DATE	02/11/25									
	KWE JOB #	24-106									

1. ALL CONSTRUCTION SHALL CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENTS (MAG), & CITY OF PRESCOTT (COP) CONSTRUCTION STANDARDS & SPECIFICATIONS, LATEST REVISIONS, UNLESS SPECIFICALLY APPROVED BY THE CITY AND MODIFIED ON THE PLANS, IN CONJUNCTION WITH THE LATEST REVISIONS OF THE MARICOPA ASSOCIATION OF GOVERNMENTS STANDARD SPECIFICATIONS AND DETAILS (MAG STANDARDS) UNLESS SPECIFICALLY MODIFIED ON THE PLANS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COPIES OF MAG AND CITY OF PRESCOTT STANDARDS AND SPECIFICATIONS AS WELL AS ALL OTHER STANDARDS AND SPECIFICATIONS NECESSARY TO ACCURATELY INTERPRET THESE PLANS.
3. ALL PLANS SIGNED BY THE CITY ENGINEER ARE NULL AND VOID ONE YEAR FROM DATE OF SIGNATURE IF CONSTRUCTION HAS NOT STARTED. RESUBMITAL AND REVIEW SHALL BE REQUIRED, AFTER ONE YEAR.
4. ALL QUANTITIES SHOWN ON THE PLANS ARE APPROXIMATE, ARE NOT VERIFIED BY THE PUBLIC WORKS DIRECTOR, AND ARE TURNED SOLELY FOR THE CONTRACTOR'S CONVENIENCE. THEY DO NOT NECESSARILY CORRESPOND TO BID SCHEDULE ITEMS. PAYMENT SHALL BE BASED ON BID SCHEDULE ITEMS FOR ACTUAL QUANTITIES PROVIDED AND INSTALLED. THE CONTRACTOR SHALL NOT BE RELIEVED OF HIS RESPONSIBILITY FOR INDEPENDENTLY ESTIMATING WORK QUANTITIES PRIOR TO BIDDING.
5. CITY OF PRESCOTT PUBLIC WORKS DEPARTMENT PERMITS(S) WILL BE REQUIRED FOR ALL OFF-SITE CONSTRUCTION AND CONSTRUCTION WITHIN THE PUBLIC RIGHT OF WAY.
6. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, AT HIS OWN EXPENSE, SUCH PERMITS AS ARE REQUIRED FROM THE APPROPRIATE AGENCIES.
7. THE PUBLIC WORKS DEPARTMENT SHALL BE NOTIFIED A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION IN THE PUBLIC RIGHT OF WAY.
8. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE AND APPROVAL OF THE PUBLIC WORKS DIRECTOR AND/OR ALL WORK MATERIALS NOT IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
9. A THOROUGH ATTEMPT HAS BEEN MADE TO SHOW THE LOCATION OF ALL UNDERGROUND OBSTRUCTIONS AND UTILITY LINES IN THE WORK AREA. THE ENGINEER AND THE CITY OF PRESCOTT WILL NOT GUARANTEE ANY LOCATIONS OR ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR MAKING A COMPLETE AND ACCURATE ON-SITE DETERMINATION OF THE LOCATIONS, MATERIAL, AND SIZE OF ALL UTILITIES, STRUCTURES, AND FIELD CONDITIONS WHICH MAY AFFECT THE PROGRESS OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO STRUCTURES AND UTILITIES ENCOUNTERED DURING CONSTRUCTION AND SHALL FIELD EXPOSE EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING IN THEIR VICINITY.
10. THE CONTRACTOR IS REQUIRED TO CONTACT BLUE STAKE (1-800-STAKEIT) A MINIMUM OF TWO WORKING DAYS (48) HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE APPROPRIATE UTILITY COMPANIES SHALL BE NOTIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION AND/OR SUPPORT OF ALL UTILITIES, POWER POLES, ETC., THAT MAY BE NECESSARY.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE PUBLIC WORKS DEPARTMENT FOR APPROVAL, TRAFFIC CONTROL PLANS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL DETERMINE AND SUBMIT FOR APPROVAL, THE EXACT SIGNING/TRAFFIC CONTROL DEVICES NECESSARY AND ALL TRAFFIC CONTROL WORK SHALL BE IN ACCORDANCE WITH THE LATEST REVISIONS THEREOF. NO STREET IS TO BE CLOSED, RESTRICTED, OR CONSTRUCTED WITHOUT A TRAFFIC CONTROL PLAN IS PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE PUBLIC WORKS DIRECTOR ONE WEEK IN ADVANCE FOR REVIEW AND APPROVAL.
13. APPROPRIATE EMERGENCY AGENCIES SHALL BE NOTIFIED A MINIMUM OF 24 HOURS PRIOR TO ANY CLOSING OF STREETS.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION SURVEYING AND LAYOUT WITH CONTROL PROVIDED BY THE DESIGN ENGINEER OR HIS DESIGNEE.
15. THE CONTRACTOR IS RESPONSIBLE FOR QUALITY CONTROL MEASURES SUFFICIENT TO PRODUCE MATERIALS AND WORKMANSHIP OF ACCEPTABLE QUALITY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT AN INDEPENDENT GEOTECHNICAL FIRM TO PERFORM QUALITY CONTROL TESTING SUCH AS SOILS AND COMPACTION TESTING AND FAIL THE ASPHALTIC CONCRETE LAYERS AND COMPACTION TESTING AND ADEQUATE PLANT CONTROL FOR EACH PAVING DAY. THE CITY, BY SEPARATE CONTRACT, WILL BE RESPONSIBLE FOR QUALITY ASSURANCE TESTING AS IT MAY DEEM NECESSARY.
16. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS OF TESTING AND INSPECTION, INCLUDING THE PRESENCE OF CITY INSPECTORS, REQUIRED AT NIGHT OR ON WEEKENDS.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RE-WORK AND/OR REMOVAL AND REPLACEMENT OF ALL MATERIALS REPRESENTED BY FAILING TESTS OR SUBSTANDARD WORKMANSHIP.
18. THE CONTRACTOR SHALL IMPLEMENT BEST-HOUSE-KEEPING MEASURES, AND EROSION AND SEDIMENT CONTROL MEASURES, TO PREVENT THE TRANSPORT OF CONSTRUCTION MATERIALS INTO DRAINAGE INLETS, STORM DRAIN MANHOLES, UTILITY STRUCTURES, OR ONTO ADJACENT STREETS AND PROPERTIES.

COP STANDARD DETAIL

GENERAL NOTES

Charles Jandheers
CITY ENGINEER

REVISED: 07/16
DETAIL No. 101P

19. APPROVAL OF A PORTION OF THE WORK IN PROGRESS DOES NOT GUARANTEE ITS FINAL ACCEPTANCE. TESTING AND EVALUATION MAY CONTINUE UNTIL THE WRITTEN FINAL ACCEPTANCE OF A COMPLETE AND WORKABLE UNIT.
20. THE CITY OF PRESCOTT MAY SUSPEND THE WORK BY WRITTEN NOTICE WHEN, IN ITS JUDGEMENT, PROGRESS IS UNSATISFACTORY. WORK BEING DONE IS UNAUTHORIZED OR DEFECTIVE, WEATHER CONDITIONS COMPLETELY IMPRacticable, OR THERE IS A DANGER TO THE PUBLIC HEALTH OR CONSTRUCTION.
21. ALL OBSTRUCTIONS IN THE RIGHT OF WAY SHALL BE REMOVED BEFORE ANY CONSTRUCTION IS PERMITTED.
22. REMOVAL OF STRUCTURES AND OBSTRUCTIONS AS NECESSARY TO COMPLETE THE WORK, OTHER THAN SPECIFICALLY SCHEDULED IN THE BID, IS INCIDENTAL TO THE CONTRACT. NO SEPARATE MEASUREMENT OF OR PAYMENT FOR UNSCHEDULED REMOVAL ITEMS WILL BE MADE.
23. CLEARING AND GRUBBING IS CONSIDERED INCIDENTAL TO THE WORK UNLESS SPECIFICALLY IDENTIFIED IN THE BID SCHEDULE. NO SEPARATE MEASUREMENT OF OR PAYMENT FOR CLEARING AND GRUBBING, AND TREE REMOVAL, WILL BE MADE. THE SITE OF ALL EXCAVATION, EMBANKMENTS, AND FILLS SHALL FIRST BE CLEARED OF STONES, TRASH, WEEDS, RUBBISH, TOPSOIL, AND LOOSE BOULDERS WHICH SHALL BE REMOVED AND DISPOSED OF PRIOR TO BIDDING. THE CONTRACTOR MUST SATISFY HIMSELF REGARDING THE CHARACTER OF THE SUBSOILS TO INCLUDE THE AMOUNT OF LOAM, CLAY, SAND, QUICKSAND, HARDPAN, GRAVEL, ROCK, WATER, AND ALL OTHER MATERIAL TO BE ENCOUNTERED AND WORK TO BE PERFORMED.
24. THE CONTRACTOR SHALL GUARD AGAINST DAMAGE DURING CONSTRUCTION TO EXISTING PROPERTIES AND IMPROVEMENTS, ANY ITEMS DAMAGED BY THE CONTRACTOR'S ACTIVITIES SHALL BE REPLACED IN KIND OR BETTER AT THE CONTRACTOR'S EXPENSE.
25. THE CONTRACTOR SHALL KEEP SUITABLE EQUIPMENT ON HAND AT THE JOBSITE FOR MAINTENANCE DUST CONTROL AND SHALL CONTROL DUST AS DIRECTED BY THE APPROPRIATE AGENCY.
26. STREET AND TRAFFIC SIGNS SHALL BE RELOCATED BY THE CONTRACTOR IF NECESSARY, AT THE DIRECTION OF THE PUBLIC WORKS DIRECTOR.
27. BACKFILL COMPACTION SHALL BE TYPE 1 (MAG, SECTION 601) UNLESS OTHERWISE NOTED.
28. AGGREGATE BASE COURSE SHALL NOT BE PLACED ON SUBGRADE UNTIL SUBGRADE REQUIREMENTS HAVE BEEN ACHIEVED.
29. NO PAVING CONSTRUCTION SHALL BE STARTED UNTIL ALL UNDERGROUND UTILITIES WITHIN THE ROADWAY PRISM ARE VERIFIED FOR DETAIL, COMPLETION, COMPLETED AND TESTED TO INCLUDE BUT NOT LIMITED TO: SEWER TESTING, LOW AIR TESTING OF MAIN LINE AND SERVICES, TRACE WIRE TESTING, DEFLECTION TESTING AND VERIFICATION OF MANHOLES CONFORMING TO COP DETAIL 200P. WATER TESTING CHLORINATION/DISINFECTION OF MAIN LINE AND SERVICES. PRESSURE TESTING, TRACE WIRE TESTING AND VERIFICATION OF VALVE BOXES CONFORMING TO COP DETAIL 39P.
30. ALL ASPHALT CONCRETE PAVEMENT SHALL BE PER APPLICABLE MAG SPECIFICATIONS AS AMENDED. THE CITY OF PRESCOTT, ASPHALT CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE PUBLIC WORKS DIRECTOR OR HIS DESIGNEE FOR APPROVAL PRIOR TO START OF CONSTRUCTION.
31. ALL UTILITY FRAMES, COVERS, VALVE BOXES, MANHOLES, ETC. SHALL BE ADJUSTED TO FINISH ASPHALT GRADE AFTER COMPLETION OF SURFACE COURSE BY THE CONTRACTOR PER COP STANDARD SPECIFICATIONS.
32. ACCEPTANCE OF THE COMPLETED PAVING STRUCTURES WILL NOT BE GIVEN UNTIL REPRODUCIBLE "AS-BUILT" PLANS HAVE BEEN SUBMITTED BY THE CONTRACTOR AND APPROVED BY THE CITY.
33. ALL CONCRETE TO BE AT LEAST 3000 PSI CLASS "A" PORTLAND CEMENT CONCRETE, UNLESS OTHERWISE NOTED ON THE PLANS OR IN SPECIFICATIONS, OR IN STANDARD DETAILS.
34. EDGES OF CONCRETE STRUCTURES TO HAVE A 3/4" CHAMFER, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
35. CONCRETE JOINTS TO HAVE A BROOM FINISH UNLESS OTHERWISE NOTED ON THE PLANS.
36. ALL EXPANSION JOINTS TO BE SEALED WITH "X" EXPANSION JOINT, PRE-FORMED JOINT FILLER AND SEALER, IN ACCORDANCE WITH MAG SECTION 72P.
37. DRIVEWAY ENTRANCES WILL BE LOCATED AS SPECIFIED ON THE PLANS UNLESS MODIFIED IN THE FIELD BY THE CONTRACTOR. DRIVEWAY ENTRANCES SHALL BE CONSTRUCTED OVER A PACKAGE AGGREGATE BASE COURSE PER MAG SPECIFICATION 702 AND COMPACTED TO 95% OF STANDARD PROCTOR DENSITY UNLESS OTHERWISE NOTED.
38. ALL DISTURBED FENCES SHALL BE REPLACED IN KIND. CONTRACTOR SHALL EXTEND FENCE REPLACEMENT TO THE CLOSEST UPRIGHT SUPPORT NECESSARY FOR STABILITY.
39. MAILBOXES SHALL BE REMOVED AND REINSTALLED AS DIRECTED BY THE U.S. POSTAL SERVICE AND THE CITY OF PRESCOTT. TEMPORARY LOCATIONS SHALL BE PER U.S.P.S.
40. BEST PRACTICE WILL BE CONSIDERED COMPLETE UNTIL ALL CURBS, PAVEMENT AND SIDEWALKS HAVE BEEN SWEEP CLEAN OF ALL DIRT AND DEBRIS.
41. THE CONTRACTOR SHALL MAINTAIN ALL WORK FOR A MINIMUM TWO YEAR PERIOD AFTER FORMAL ACCEPTANCE OF THE WORK BY THE CITY.

1. ALL WORK SHALL CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENTS (MAG), & CITY OF PRESCOTT (COP) CONSTRUCTION STANDARDS & SPECIFICATIONS, LATEST REVISIONS, WHICH ARE ON FILE IN THE OFFICE OF THE CITY ENGINEER.
2. ALL EXISTING FRAMES, COVERS, VALVE BOXES, & MANHOLES SHALL BE EITHER REPLACED OR ADJUSTED TO FINISH GRADE DEPENDING ON PLAN CALL OUT UPON COMPLETION OF PAVING, UTILITY, OR RELATED CONSTRUCTION.
3. ANY QUANTITIES SHOWN ON PLANS ARE NOT VERIFIED BY THE PUBLIC WORKS UTILITIES DIRECTOR.
4. ACCEPTANCE OF THE COMPLETED WORK WILL NOT BE GIVEN UNTIL 3 MIL MYLAR & CAD FORMAT DIGITAL "AS-BUILT" PLANS ON CITY OF PRESCOTT SURVEY DATUM & COORDINATES HAVE BEEN SUBMITTED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.
5. CITY OF PRESCOTT PUBLIC WORKS UTILITIES SHALL BE NOTIFIED A MINIMUM OF 24 HOURS PRIOR TO THE START OF ANY WORK.
6. ALL WORK & MATERIALS WHICH DO NOT CONFORM TO THE SPECIFICATIONS ARE SUBJECT TO REMOVAL & REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
7. ANY WORK PERFORMED WITHOUT THE KNOWLEDGE OF THE CITY INSPECTOR OR HIS REPRESENTATIVE IS SUBJECT TO REMOVAL & REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR SHALL PROVIDE SUFFICIENT MEN, EQUIPMENT, & MATERIAL ON THE JOB AT ALL TIMES DURING CONSTRUCTION TO COMPLY WITH SPECIFICATIONS & TO COMPLETE THE WORK.
9. OP INSPECTION TO BE DONE BY THE CITY OF PRESCOTT PUBLIC WORKS DEPARTMENT OR THEIR REPRESENTATIVE. PRIVATE DEVELOPMENTS SHALL PROVIDE FOR INDEPENDENT 3RD PARTY INSPECTIONS.
10. CONTRACTOR TO NOTIFY PROJECT ENGINEER 72 HOURS (3 WORKING DAYS) IN ADVANCE OF CONSTRUCTION TO SCHEDULE CONSTRUCTION CONTROL STAKING.
11. THE CONTRACTOR IS TO UNCOVER ALL EXISTING LINES BEING TIED INTO AND VERIFY GRADES, MATERIAL, SIZE & ELEVATIONS BEFORE COMMENCING CONSTRUCTION & ORDERING MATERIALS.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UNDERGROUND PIPELINES, TELEPHONE & ELECTRICAL CONDUITS & STRUCTURES IN ADVANCE OF ANY CONSTRUCTION & OBSERVE ALL POSSIBLE PRECAUTIONS TO AVOID ANY DAMAGE TO SUCH. THE ENGINEER &/OR OWNER WILL NOT GUARANTEE ANY LOCATIONS AS SHOWN ON THESE PLANS.
13. CONTRACTOR SHALL NOTIFY "BLUE STAKE" AT 1-800-STAKEIT (1-800-782-5348) AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
14. CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN & MAKE HIS BID BASED UPON THOSE VERIFICATIONS. IF ANY DISCREPANCY IN QUANTITIES IS FOUND, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AS SOON AS POSSIBLE.
15. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS MUST BE COMPLIED WITH.
16. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS SHALL APPLY WHEN MORE STRINGENT THAN THE MAG OR CITY OF PRESCOTT STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. MORE SPECIFICALLY WHERE THEY PERTAIN TO MAXIMUM ALLOWABLE SEWER LINE/PRESSURE SEWER LINE EXFILTRATION-INFILTRATION RATES.
17. ALL PLANS SIGNED BY THE CITY ARE NULL & VOID ONE YEAR FROM DATE OF SIGNATURE IF CONSTRUCTION HAS NOT STARTED AND/OR IS NOT ACTIVELY PROGRESSING.
18. PROJECT CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TRAFFIC CONTROL PLANS WHICH SHALL BE MADE A PART OF THE PLAN REVIEW REQUEST TO THE CITY ENGINEER FOR APPROVAL.
19. ALL WATER LINES & APPURTENANCES SHALL BE PROVIDED WITH TRACE WIRE PER CITY STANDARD DETAIL. TRACE WIRE SHALL BE SUBJECT TO A TRACEABILITY TEST, EASILY ACCESSIBLE, & ANY DEFICIENCIES SHALL BE CORRECTED PRIOR TO PAVING. THE TRACE WIRE SHOULD BE TESTED & SUBMITTED AS A PACKAGE WITH THE TESTING PACKET.
20. WATER-SEWER SEPARATION SHALL BE PURSUANT TO AAC R-18-5-502C.
21. WATER MAINS SHALL BE SUBJECT TO A PRESSURE & LEAKAGE TEST IN ACCORDANCE WITH AWWA C-500 STANDARD.
22. WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH ADEQ ENGINEERING BULLETIN NO. 8 "DISINFECTION OF WATER SYSTEMS".
23. OPERATION OF VALVES TO BE DONE BY CITY PERSONNEL ONLY.
24. DUCTILE IRON PIPE TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS. ALL MATERIALS USED IN THE INSTALLATION OF DUCTILE IRON PIPE SHALL BE PURSUANT TO AAC R-18-4.

COP STANDARD DETAIL

WATER PLAN GENERAL NOTES

Charles Jandheers
CITY ENGINEER

REVISED: 07/16
DETAIL No. 103P

GENERAL GRADING AND PAVING NOTES:

A. GRADING

1. Borrow material should be free of debris, organic materials, and three inch (3-inch) size particles or larger. We recommend fill material conform to the following general specification or approved equal:

U.S. STANDARD SIEVE

PERCENT PASSING

3.0-inch	100
NO. 40	40-60
NO. 200	0-30

The Plasticity Index should be between 2 and 15 unless otherwise specified in the project soils report.

B. PAVING

1. All aggregate base course (ABC) shall be placed in 6 to 8-inch loose lifts, the moisture content adjusted to near optimum, then compacted to 98 percent of ASTM D-698.
2. All asphaltic concrete (A.C.) shall be 19 mm as per applicable MAG Specifications. Mix design shall be submitted to the City for approval prior to start of construction.
3. A.C. compaction shall be 95 percent of ASTM D-1559, 75 blow Marshall Density test.

GENERAL CONSTRUCTION NOTES:

1. The positions of existing underground utilities as shown on the construction plans were determined from site inspection, and other "Best Available" information. The Contractor shall contact "Blue Stake" for utility location and carefully excavate (including potholing if required) to determine the true horizontal and vertical positions of utilities. The contractor is responsible for protecting existing utilities and shall notify the owner of any conflicting conditions.
2. All existing underground utilities shown are approximate and are to be verified by each Subcontractor. Owner does not accept any responsibility for the accuracy of the location of existing utilities indicated on the Drawings. Verify location of existing utilities and exercise every precaution when working on or near these areas, to avoid damage to those existing facilities. Utility lines may be encountered in excavations that were not known (or shown to exist), so caution should be taken in all excavations. Active or inactive utilities encountered shall be handled in accordance with the requirements of the utility companies.
3. Prior to bidding the work, the Contractor shall thoroughly satisfy himself as to the actual conditions and requirements of the work. No claim shall be made against the Owner or the Engineer for any alleged misunderstanding of the conditions or nature of the work.
4. Nothing contained in the construction drawings shall create, nor shall be construed to create, any contractual relationship between the Engineer and the Contractor or any Subcontractor.
5. The Engineer will not be responsible for construction means, methods, techniques, sequences or procedures or for safety precautions or programs utilized in connection with the work.
6. It shall be the responsibility of the bidder to verify all quantities, including excavation, borrow, embankment, shrink or swell, ground compaction, haul and any other items affecting his bid and to base his bid per the intent of the bid schedule. It shall be the bidder's responsibility to notify the City prior to bidding of any discrepancies.
7. Disposal and/or stockpiling of excess material shall be done in such a way that will not create a nuisance. The placing of material on private property of another requires written authorization.
8. The contractor shall verify all pipe sizes and material at every point of connection prior to ordering material. Notify the City of any discrepancy in pipe size or material.

COP STANDARD DETAIL

WASTEWATER PLAN
GENERAL NOTES

Charles Jandheers
CITY ENGINEER

REVISED: 07/16
DETAIL No. 104P

24. SEWER MANHOLES EXFILTRATION TESTS SHALL BE DONE ON 100% OF ALL MANHOLES. VACUUM TESTING IN ACCORDANCE WITH CITY STANDARDS MAY BE USED IN LIEU OF EXFILTRATION TEST. THE CONTRACTOR SHALL TEST EACH MANHOLE USING ONE OF THE FOLLOWING TEST PROTOCOLS:
24A. WATER-TIGHTNESS TESTING BY FILLING THE MANHOLE WITH WATER. THE CONTRACTOR SHALL ENSURE THAT THE DROP IN WATER LEVEL FOLLOWING OVERDRAINING DOES NOT EXCEED 0.00034 OF THE TOTAL MANHOLE VOLUME PER HOUR.
24B. NEGATIVE AIR PRESSURE TESTING USING THE "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE AIR PRESSURE (VACUUM) TEST, C1244-02(2002) PUBLISHED BY THE AMERICAN SOCIETY FOR TESTING AND MATERIALS. THIS MATERIAL IS INCORPORATED BY REFERENCE & DOES NOT INCLUDE ANY LATER AMENDMENTS OR EDITIONS OF THE INCORPORATED MATERIALS & MAY BE OBTAINED FROM THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY, 1110 W. WASHINGTON, PHOENIX, AZ 85007, OR OBTAINED FROM THE AMERICAN SOCIETY FOR TESTING & MATERIALS INTERNATIONAL, 100 BAR HARBOR DRIVE, WEST CONSHOHOCKEN, PA 19426.
25. SEWER LINE DEFLECTION TESTS WITH AN APPROPRIATELY SIZED MANDREL SHALL BE DONE ON 100% OF ALL NON-BIDDING PIPE LINES.
26. THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL SEWER MAINS AND LATERALS INSTALLED WITHIN THE CITY'S COLLECTION SYSTEM UTILIZING A SEWER CCTV SYSTEM AND/OR COMPLETE BACKFILL AND COMPACTION BUT BEFORE INSTALLING ANY PORTION OF THE PAVEMENT STRUCTURAL SECTION. THE INSPECTION SHALL COMPLY WITH THE CITY'S VIDEO ACCEPTANCE PROCEDURE. THE CONTRACTOR SHALL PROVIDE 72 HOURS ADVANCE NOTICE FOR CITY STAFF TO BE PRESENT DURING THE VIDEO INSPECTION AND SHALL PROVIDE THE CITY A VIDEO DVD AND HARD COPY OF THE INSPECTION REPORT UPON COMPLETION.
27. COVER EACH SEWER LINE WITH AT LEAST 3 FEET OF EARTH COVER MEETING THE REQUIREMENTS "TRENCH EXCAVATION, BACKFILLING, & COMPACTION" (SECTION 601) REVISED 2004, PUBLISHED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS, & "RIGID PIPE BEDDING FOR SANITARY SEWERS" (MWM 104) REVISED JULY 2002, PUBLISHED BY PINA COUNTY WASTEWATER MANAGEMENT.
28. PRESSURE SEWER MAINS AND SERVICE LATERALS (LPS) SHALL BE SUBJECT TO A PRESSURE & LEAKAGE TEST IN ACCORDANCE WITH AWWA-C-800 STANDARD. TEST PRESSURE SHALL BE A MINIMUM OF 100 PSI, OR 50 PSI OVER WORKING PRESSURE, WHICHEVER IS GREATER. TESTING SHALL BE DONE AFTER BACKFILL TO SUBGRADE.

23. SEWER LINE LOW PRESSURE AIR TESTS SHALL BE DONE ON 100% OF ALL LINES AFTER PLACEMENT OF BACKFILL TO PAVEMENT SUBGRADE. TEST EACH SEGMENT OF THE SEWER LINE FOR LEAKAGE USING THE APPLICABLE METHOD BELOW AND RECORD THE RESULTS.
23A. "STANDARD TEST METHOD FOR INSTALLATION OF ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR, F1417-92(1998)" PUBLISHED BY THE AMERICAN SOCIETY FOR TESTING AND MATERIALS.

APPROVED TRAFFIC CONTROL PLAN AND R.O.W. PERMIT MUST BE OBTAINED FROM PUBLIC WORKS PRIOR TO BEGINNING WORK IN THE R.O.W.

2		1/2" = 1'			
DATE	REVISION	NO.	KELLEY/WISE ENGINEERING, INC.		
			146 GROVE AVENUE PRESCOTT, ARIZONA 86301 (928) 771-1730 FAX 778-2220 gkelley@kelley-wise.com		
EUROPEAN TECHNIQUES 7		APN: 103-50-019		6686 INTER CAL WAY PRESCOTT, AZ	
DRAWN		DESIGN	CHECK	DATE	KWE JOB #
ZAJ	ZAJ	GRK	02/11/25	24-106	
SHEET C-002 2 OF 10					

- ALL GRADING SHALL CONFORM TO THE CURRENT CITY ADOPTED EDITION OF THE INTERNATIONAL BUILDING CODE, AND CITY OF PRESCOTT LAND DEVELOPMENT CODE (REFERENCE CITY OF PRESCOTT STANDARD SECTIONS).
- ALL PROVISIONS OF THE PRELIMINARY SOILS REPORT PREPARED BY _____ ETC _____, DATED JULY 12, 2007, SHALL BE COMPLIED WITH DURING OPERATIONS.
- THIS PLAN IS FOR GRADING PURPOSES ONLY. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF DRIVEWAY LOCATIONS OR SIZES, PARKING LOT LAYOUT, SEWER AND WATER FACILITIES, BUILDING LOCATIONS, OFF-SITE DRAINAGE FACILITIES OR OTHER ITEMS NOT RELATED DIRECTLY TO THE BASIC GRADING OPERATION.
- CERTIFICATION FROM THE REGISTERED CIVIL ENGINEER AND SOILS/GEOLOGICAL ENGINEER STATING THAT THE ROUGH GRADING HAS BEEN COMPLETED PER THE APPROVED PLAN, AND A COMPACTION REPORT FROM THE SOILS ENGINEER ON ANY FILL AREAS THAT ARE REQUIRED SHALL BE PROVIDED PRIOR TO BUILDING PERMITS BEING ISSUED.
- PARTIES NAMED ON ADEQ'S NOTICE OF INTENT (NOI) ARE RESPONSIBLE FOR EROSION, DUST, MUD, SILT, DEBRIS, AND TEMPORARY DRAINAGE CONTROL DURING GRADING OPERATIONS AND MAY BE REQUIRED TO PROVIDE A SWPPP.
- ANY ON-SITE RETAINING WALLS WILL REQUIRE APPROVAL AS PART OF THESE PLANS. ANY NECESSARY RETAINING WALLS ON THE PERIMETER OF THIS SITE MAY BE REQUIRED TO BE IN PLACE AND APPROVED BY THE CITY BUILDING DEPARTMENT PRIOR TO THE START OF GRADING. A SEPARATE PLAN WITH REQUIRED STRUCTURAL CALCULATIONS MAY BE REQUESTED FOR RETAINING WALLS.
- ANY INFRASTRUCTURE CONSTRUCTED IN THE PUBLIC RIGHT OF WAY WILL REQUIRE SEPARATE PLAN APPROVAL AND INSPECTION FROM THE CITY ENGINEER.
- ANY WALLS, FENCES, STRUCTURES AND/OR APPURTENANCES ADJACENT TO THIS PROJECT SHALL BE PROTECTED IN PLACE. IF GRADING OPERATIONS DAMAGE OR ADVERSELY AFFECT SAID ITEMS IN ANY WAY, THE CONTRACTOR AND/OR DEVELOPER IS RESPONSIBLE FOR WORKING OUT AN ACCEPTABLE SOLUTION TO THE SATISFACTION OF THE AFFECTED PROPERTY OWNER(S).
- THE CONTRACTOR/DEVELOPER IS RESPONSIBLE FOR ENSURING THAT RETAINING WALLS DO NOT INTERFERE WITH PROVISION OF UTILITIES. WALLS MUST BE CONSTRUCTED ON SITE AND OUTSIDE OF THE RIGHT OF WAY. THIS SHALL INCLUDE THE FOOTINGS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT COMPACTION HAS BEEN ATTAINED ON THE ENTIRE GRADING SITE IN ACCORDANCE WITH THE GENERAL ENGINEERING PLAN, INCLUDING FILL AREAS OUTSIDE THE BUILDING PADS AND ON ALL FILL SLOPES, AND SHALL BE CERTIFIED BY THE SOILS ENGINEER.
- CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER FROM THE RESPONSIBILITY FOR CORRECTION OR ERROR OR OMISSION DISCOVERED DURING CONSTRUCTION. UPON REQUEST, THE REQUIRED PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE CITY ENGINEER FOR APPROVAL.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CALL THE CITY ENGINEER'S OFFICE AT (928) 777-1140 FOR ANY REQUIRED CIVIL INSPECTION 24 HOURS PRIOR TO PERFORMING ANY WORK. WORK PERFORMED WITHOUT CALLING FOR INSPECTION MAY BE REJECTED AND, IF REJECTED, SHALL BE REMOVED SOLELY AT THE CONTRACTOR'S EXPENSE.
- NO GRADING SHALL COMMENCE WITHOUT OBTAINING A GRADING PERMIT AND NOTIFYING THE CITY OF PRESCOTT OR DEVELOPER'S GRADING INSPECTOR TO SCHEDULE A PREGRADING MEETING TWO WORKING DAYS PRIOR TO THE START OF WORK.
- PRIOR TO THE START OF GRADING ALL SWPPP MEASURES SHALL BE IN PLACE. ALL DEBRIS, INCLUDING EXISTING STRUCTURES, FOOTINGS, FOUNDATIONS AND RUBBLE SHALL BE REMOVED FROM THE SITE TO THE SATISFACTION OF THE SOILS ENGINEER.
- AFTER REMOVAL OF DEBRIS, ANY EXISTING FILL OR DISTURBED NATURAL SOILS SHALL BE EXCAVATED TO THE SATISFACTION OF THE SOILS ENGINEER.
- THE EXPOSED SOILS SHALL THEN BE INSPECTED BY THE SOILS ENGINEER, AND ANY ADDITIONAL OVER EXCAVATION SHALL THEN BE MADE IN ACCORDANCE WITH THE SOILS ENGINEER'S RECOMMENDATIONS AND AS CONTAINED IN THE SOILS REPORT.

COP STANDARD DETAIL

GRADING AND DRAINAGE
NOTES

Charles Amdeurs
CITY ENGINEER

REVISED: 07/16
DETAIL No. 105P-1

- THE CONTRACTOR SHALL SPOT LAYOUT THE ENTIRE PROJECT AND CONTACT THE CITY INSPECTOR TO MAKE ARRANGEMENTS FOR INSPECTION PRIOR TO INSTALLING TRAFFIC SIGNS OR PAYMENT MARKINGS. ANY SIGNING OR STRIPING INSTALLED BEFORE LAYOUT APPROVAL SHALL BE SUBJECT TO REMOVAL AND REINSTALLATION AT THE CONTRACTOR'S EXPENSE.
- TRAFFIC SIGN DIMENSIONS, COLORS AND LETTERING SHALL CONFORM TO THE LATEST MUTCD SPECIFICATIONS. TRAFFIC SIGN SIZE SHALL BE STANDARD UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- SIGN LOCATION SHALL BE COORDINATED WITH LANDSCAPING PLANS TO ENSURE SIGN VISIBILITY PER AASHTO STANDARDS.
- ALL RETRO-REFLECTIVE SIGNS AND PEDESTRIAN WARNING SIGNS SHALL BE RETRO-REFLECTIVE WITH SHEETING MATERIAL TO BE DIAMOND WIP GRADE, MEETING OR EXCEEDING ASTM 4956-04.
- ALL OTHER SIGNS ARE TO BE RETRO-REFLECTIVE WITH SHEETING MATERIAL TO BE HIGH INTENSITY PRISMATIC MEETING OR EXCEEDING ASTM 4956-04.
- SIGN BLANKS SHALL BE 30 MIL ALLOY TREATED ALUMINUM WITH ALDINE 1200 CONVERSION COATING, 0.060" THICK WITH ROUNDED CORNERS.
- SIGNS SHALL BE MOUNTED ON STREET LIGHT POLES WHENEVER FEASIBLE.
- STRIPING SHALL CONFORM TO THE MOST RECENT EDITION OF THE MUTCD WITH REGARD TO SIZE, COLOR, REFLECTIVITY AND PLACEMENT UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- ALL THERMOPLASTIC APPLICATIONS SHALL CONFORM TO ADOT SPECIFICATION 704.
- TRANSVERSE MARKINGS, SYMBOLS AND LEGENDS SHALL BE 30 MIL (0.030 INCH) THICK, LONGITUDINAL MARKINGS SHALL BE 60 MIL (0.060 INCH) THICK ALKYL EXTRUDED THERMOPLASTIC.
- ALL PAINT APPLICATION SHALL CONFORM TO ADOT SPECIFICATION 708.
- ALL CONFLICTING STRIPING, PAVEMENT MARKINGS, AND CURB PAINT SHALL BE REMOVED BY WET SANDBLASTING OR OTHER APPROVED METHOD PRIOR TO THE INSTALLATION OF NEW STRIPING. SLURRY OR PAINT SHALL NOT BE USED TO COVER EXISTING PAINT. PAVEMENT THAT IS DAMAGED DUE TO THE REMOVAL OF MARKERS OR STRIPING SHALL BE REPAIRED TO THE SATISFACTION OF THE CITY ENGINEER OR HIS DESIGNEE.

COP STANDARD DETAIL

SIGNING AND
STRIPING NOTES

Charles Amdeurs
CITY ENGINEER

REVISED: 07/16
DETAIL No. 106P-1

- THE EXPOSED SOILS SHALL THEN BE SCARIFIED TO PROVIDE A BOND WITH NEW FILL, BROUGHT TO PROPER MOISTURE CONTENT AND COMPACTED TO AT LEAST 90% OF THE MAXIMUM DENSITY, AS DETERMINED BY ASTM D-1557-79 OR EQUIVALENT COMPACTION SHALL BE OBTAINED BY METHODS SPECIFIED BY THE SOILS ENGINEER. ROAD PRISM SUBGRADE SHALL BE COMPACTED TO AT LEAST 95% STANDARD OR MODIFIED PER SOILS ENGINEER'S RECOMMENDATIONS.
- THE SOILS AND DESIGN ENGINEER OF RECORD SHALL ALSO BE RESPONSIBLE TO INSPECT, VERIFY AND REPORT THAT PROPER COMPACTION HAS BEEN OBTAINED BY EARTHWORK CONTRACTOR OR SUBCONTRACTOR AND PRIVATE UTILITY FRANCHISES CONCERNING UTILITY LINE BACKFILL, TO INCLUDE ELECTRICAL, GAS, CABLE, FIBEROPTIC AND LANDSCAPE IRRIGATION LINES. ADDITIONALLY, WATER AND SEWER LINES TO BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH GENERAL ENGINEERING REQUIREMENTS SECTION AND DETAIL.
- AN AS-GRADED GRADING PLAN AND THE CERTIFICATION OF COMPLIANCE FORMS FOR SAID GRADING PLAN WITH THE PROPER STAMPS AND SIGNATURES ARE TO BE SUBMITTED TO THE CITY ENGINEER PRIOR TO RELEASE OF GRADING BOND AND PRIOR TO FINAL GRADING INSPECTION. BUILDING PAD CERTIFICATION SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT WHEN REQUESTED.
- NO FILL SHALL BE PLACED UNTIL STRIPPING OF VEGETATION, REMOVAL OF UNSUITABLE SOILS, AND INSTALLATION OF SUBDRAIN (IF ANY) HAVE BEEN INSPECTED AND APPROVED BY THE SOILS ENGINEER.
- ENGINEER MUST SET GRADE STAKES FOR ALL DRAINAGE DEVICES AND OBTAIN INSPECTION BEFORE POURING.
- GRADING SHALL NOT BE STARTED WITHOUT FIRST NOTIFYING CITY PUBLIC WORKS INSPECTION DEPARTMENT. A PRE-GRADING MEETING ON THE SITE IS REQUIRED BEFORE BEGINNING GRADING ACTIVITIES BY THE FOLLOWING PEOPLE PRESENT: OWNER, GRADING CONTRACTOR, DESIGN CIVIL ENGINEER, SOIL ENGINEER/GEOLOGIST, PUBLIC WORKS INSPECTOR, AND WHEN REQUIRED, THE ARCHAEOLOGIST AND PALEONTOLOGIST. THE REQUIRED INSPECTIONS FOR GRADING WILL BE EXPLAINED AT THE PRE-CONSTRUCTION MEETING.
- ALL EXISTING FILLS SHALL BE APPROVED AND CERTIFIED BY THE SOILS ENGINEER OR REMOVED PRIOR TO PLACING ADDITIONAL FILLS.
- ALL TRENCH BACKFILLS SHALL BE TESTED AND APPROVED BY THE SOIL ENGINEER.
- THE COMPACTION REPORT AND APPROVAL FROM THE SOIL ENGINEER SHALL INDICATE THE TYPE OF FIELD TESTING PERFORMED. EACH TEST SHALL BE IDENTIFIED WITH THE METHOD OF OBTAINING THE IN-PLACE DENSITY, WHETHER SAND CONE OR NUCLEAR GAUGE, AND SHALL BE SO NOTED FOR EACH TEST.
- EXPORT SOIL MUST BE TRANSPORTED TO A LEGAL DUMP OR TO A PERMITTED SITE SHOWN CLEARLY ON APPROVED PLANS.
- ALL EXISTING DRAINAGE COURSES THROUGH THIS SITE SHALL REMAIN OPEN UNTIL FACILITIES TO HANDLE STORM WATER ARE APPROVED AND FUNCTIONAL. HOWEVER, IN ANY CASE, THE PERMITTEE SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS.

- A COPY OF THE APPROVED GRADING AND DRAINAGE PLAN FOR THIS PROJECT AND EROSION AND SEDIMENT CONTROL (ESC) PLAN OR STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE MAINTAINED ON THE SITE AND AVAILABLE FOR REVIEW. THOSE ELEMENTS OF THE GRADING AND DRAINAGE PLAN PERTINENT TO OR REFERENCED ON THE SWPPP SHALL BE CONSIDERED A PART OF THE SWPPP.
- THE ESC/SWPPP AND RELATED RECORDS MUST BE MADE AVAILABLE UPON REQUEST TO ADEQ AND THE CITY OF PRESCOTT.
- THE IMPLEMENTATION OF THESE PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE FACILITIES IS THE RESPONSIBILITY OF THE PERMITTEE/CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED AND A NOTICE OF TERMINATION HAS BEEN SUBMITTED.
- THE SCHEMATIC EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE A MINIMUM. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEANS TO PROTECT EXISTING FACILITIES AND ADJACENT PROPERTIES FROM NOISE, DUST, AND STORM WATER RUNOFF THROUGHOUT CONSTRUCTION OF THE PROJECT AND BUILDINGS ON LOTS, AND SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER THAT STORM WATER WILL BE CONTAINED ON SITE OR CHANNELLED INTO A STORM DRAIN SYSTEM, PROVIDED THAT IT IS FREE FROM POLLUTANTS AND DEBRIS.
- CONTRACTOR SHALL PERMANENTLY STABILIZE ALL DISTURBED SLOPES AS STATED ON APPROVED CONSTRUCTION PLANS. ALL EROSION CONTROL STRUCTURES SHALL REMAIN IN PLACE UNTIL EXPOSED SLOPES HAVE BEEN PERMANENTLY STABILIZED.
- CONTRACTOR SHALL TAKE MEASURES TO PREVENT OR MINIMIZE THE GENERATION, EMISSION AND/OR TRANSPORT OF FUGITIVE DUST FROM CONSTRUCTION ACTIVITIES.
- THIS PLAN SHALL BE IN EFFECT UNTIL ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED, TRANSFERRED TO NEW OWNERSHIP, OR DEVELOPED UNDER FUTURE PLANS WITH A NEW NOTICE OF INTENT (NOI), SWPPP, AND PERMIT. ONCE THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS MET THE FINAL STABILIZATION REQUIREMENTS OF THE PERMIT, THE AUTHORIZED SITE REPRESENTATIVE MAY FILE A NOTICE OF TERMINATION (NOT) WITH ADEQ, WITH A COPY SUBMITTED TO THE CITY OF PRESCOTT ENGINEERING DIVISION TO TERMINATE COVERAGE UNDER THE PERMIT.
- A CONCRETE WASHOUT SHALL BE INSTALLED FOR ALL PROJECTS THAT PROPOSE CONCRETE TO BE MIXED ON SITE OR BE DELIVERED FROM A BATCH PLANT. THE CONCRETE WASHOUT SHALL BE LOCATED A MINIMUM OF FIFTY (50) FEET FROM ANY DRAINAGE INFRASTRUCTURE OR NATURAL DRAINAGE FEATURES OR WATER BODIES AND INCORPORATE AN IMPERMEABLE LINER TO CONTAIN THE REQUIRED VOLUME. ALL DRIED CONCRETE WASTE SHALL BE BROKEN INTO MANAGEABLE PIECES AND DISPOSED OF OFF-SITE AT AN APPROVED FACILITY.

COP STANDARD DETAIL

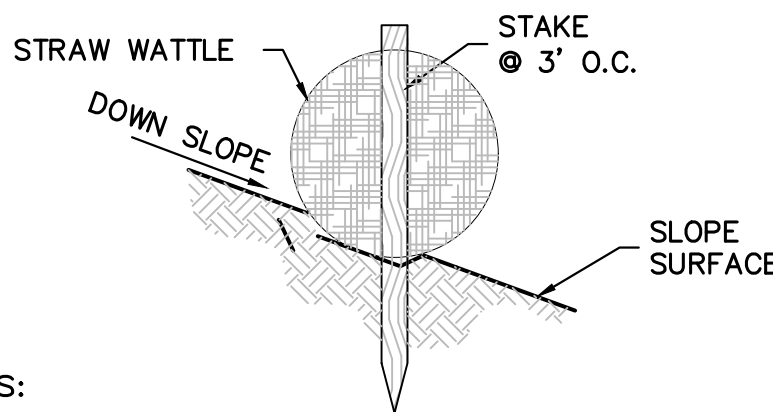
EROSION AND SEDIMENTATION
CONTROL NOTES

Charles Amdeurs
CITY ENGINEER

REVISED: 07/16
DETAIL No. 105P-2

EROSION CONTROL/SWPPP GENERAL NOTES

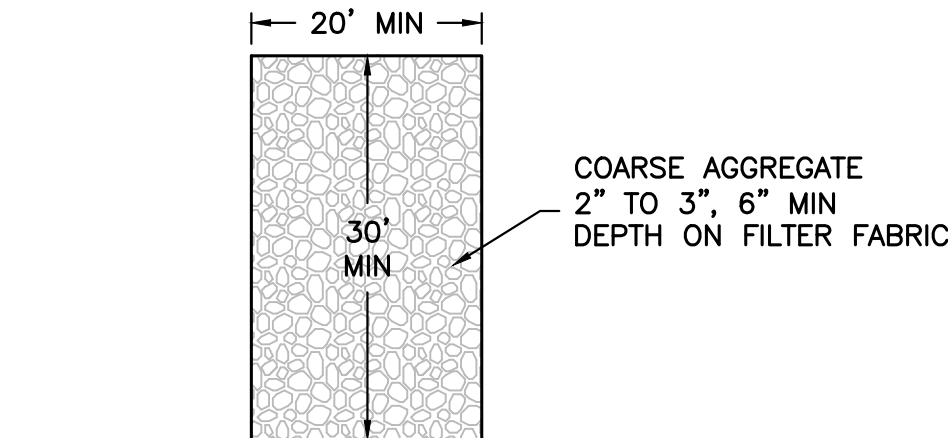
- The Notice of Intent (NOI) shall be completed and submitted to the Arizona Department of Environmental Quality (ADEQ) prior to any construction activity (including clearing & grubbing and grading).
- The prime contractor shall perform, at a minimum, a visual inspection of the construction site once every seven days and within 24 hours of rainfall greater than or equal to a half an inch (1/2-inch). The operator shall prepare a report documenting his/her findings on the conditions of the SWPPP controls and note any erosion problem areas. The operator's report is to be maintained on site by the operator. Facilities shall be maintained as necessary to ensure their continued functioning. In addition, all temporary siltation controls shall be maintained in a satisfactory condition until such time that construction is completed, permanent drainage facilities are operational, and the potential for erosion has passed as determined by the City Engineer or his designee.
- The facilities shown on this plan must be constructed in conjunction with all clearing and grading activities in such a manner as to insure that sediment-laden water does not enter the drainage system or violate applicable water standards. Additionally, they must be installed and in operation prior to any grading or land clearing. Wherever possible, natural vegetation should be retained and maintained for silt and erosion control.
- The general contractor to whom the "at-risk"/final grading permit will be issued must be included on the approved NOI issued by ADEQ.
- The owner (operator)/contractor of the site must also maintain records with the following information:
 - The dates when major grading activities occur in a particular area;
 - The dates when construction activities cease in an area, temporarily or permanently; and
 - The dates when an area is stabilized, temporarily or permanently; and
 - The dates when any maintenance/replacement or removal of required BMP's.
- Construction sites are dynamic in nature. The site operator is required to maintain full compliance with the general construction permit, as issued by ADEQ, to maintain an effective SWPPP. As such, this plan must be updated to accurately reflect site features and operations which may become evident during construction, and/or during or after rainfall events. The plan must also be amended if it is determined by the Design Engineer, or the City Engineer as not effective at minimizing pollutant discharges from the site.
- Contractor shall hydro-seed all exposed slopes employing best management practices and/or recommended soil preparation to promote and sustain growth. All erosion control structures shall remain in place until exposed slopes have been permanently stabilized. Contractor shall be responsible for watering and maintaining hydro-seed until stabilized. Any deviation shall be approved by the engineer.
- All site revegetation shall be completed within 90 days of completion of grading work, or prior to release of subdivision guarantee or issuance of Certificate of Occupancy, which ever occurs first. Permanent bank/slope stabilization shall be certified by the Project Engineer or Landscape Architect documenting the bank/slope stabilization was completed according to plan prior to final subdivision release or certificate of occupancy.
- Contractor shall protect all permanent and existing storm water facilities from sediment/silt during construction.
- Silt fencing and/or other sediment control (i.e. straw baffles, hay bales, etc.) shall be used at the toe of any erodible slope, following contours of slope (do not install silt fence across any drainage course).
- Contractor to coordinate erosion control/SWPPP implementation with the City's environmental coordinator.



NOTES:

- Temporary straw wattles shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
- Anchors shall be rebar, steel pickets or 2" x 2" stakes, and shall be long enough to extend at least 1.5 to 2.0 feet into the ground when the top is flush.

⑨ STRAW WATTLE BARRIER N.T.S



⑪ STABILIZED CONSTRUCTION ENTRANCE N.T.S

EUROPEAN TECHNIQUES 7
APN: 103-50-019
6686 INTER CAL WAY
PRESCOTT, AZ

NOTES



DRAWN	JAJ	DESIGN	JAJ	CHECK	GRK	DATE	02/11/25	KWE JOB #	24-106
-------	-----	--------	-----	-------	-----	------	----------	-----------	--------

SHEET
C-003
3 OF 10

KELLEY/WISE ENGINEERING, INC.

146 GROVE AVENUE
PRESCOTT, ARIZONA 86301
(928) 771-1730
FAX 778-2220
gkelley@kelley-wise.com

1/2" = 1'

2



Pair: X:\KWE\PROJECTS\2024\24-106 WAKA-EUROPEAN TECHNIQUES FILENAME: 24-106 CIVIL BASE DWG PLOT DATE: 2/11/2025 7:44 AM SHEET SET: 24-106 SHEET SET SHEET TOTAL: 10

APPROXIMATE RAW
EARTHWORK QUANTITIES*

EXCAVATION = 4,838 CY

EMBANKMENT = 2,658 CY

*SPECIAL NOTE: IT SHALL BE THE RESPONSIBILITY OF THE BIDDER TO VERIFY ALL QUANTITIES, INCLUDING EXCAVATION, BORROW, EMBANKMENT, SHRINK OR SWELL, GROUND COMPACTION, HAUL AND ANY OTHER ITEMS AFFECTING THE BID AND TO BASE THE BID PER THE INTENT OF THE PLANS. IT SHALL BE THE BIDDER'S RESPONSIBILITY TO NOTIFY THE ENGINEER PRIOR TO BIDDING OF ANY DISCREPANCIES. THESE QUANTITIES ASSUME SUBGRADE AT THE BUILDING IS 8" BELOW FINISHED FLOOR, 8" BELOW SIDEWALK GRADES, 9" BELOW PAVEMENT GRADES, 10" BELOW DUMPSTER ENCLOSURE, AND 12" BELOW RETURN TYPE DRIVEWAY ENTRANCE. THESE QUANTITIES DO NOT INCLUDE ANY OVER-EXCAVATION THAT MAY BE REQUIRED PER THE SOILS REPORT, TRENCHING OR OTHER EXCAVATION.

APPROXIMATE DISTURBED AREA = ±1.24 ACRES

APN: 103-50-008D
OWNER: Corkery Management LLC
6690 Inter Cal Way
Prescott, AZ 86301

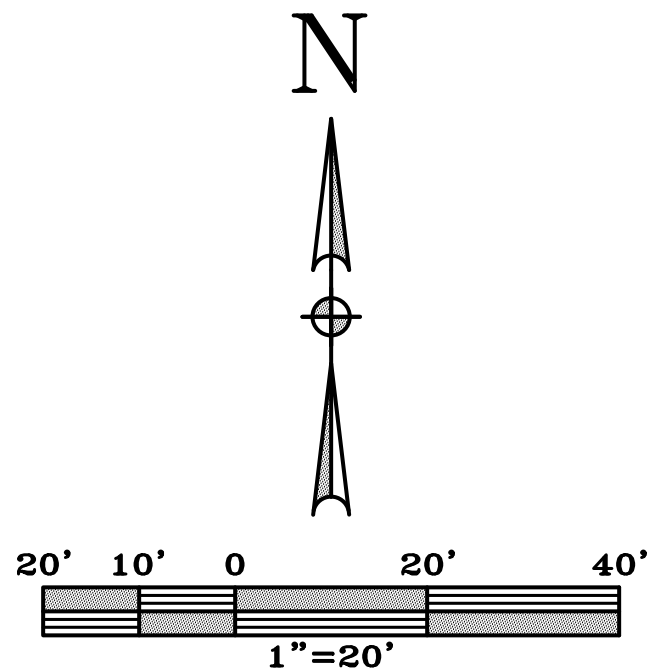
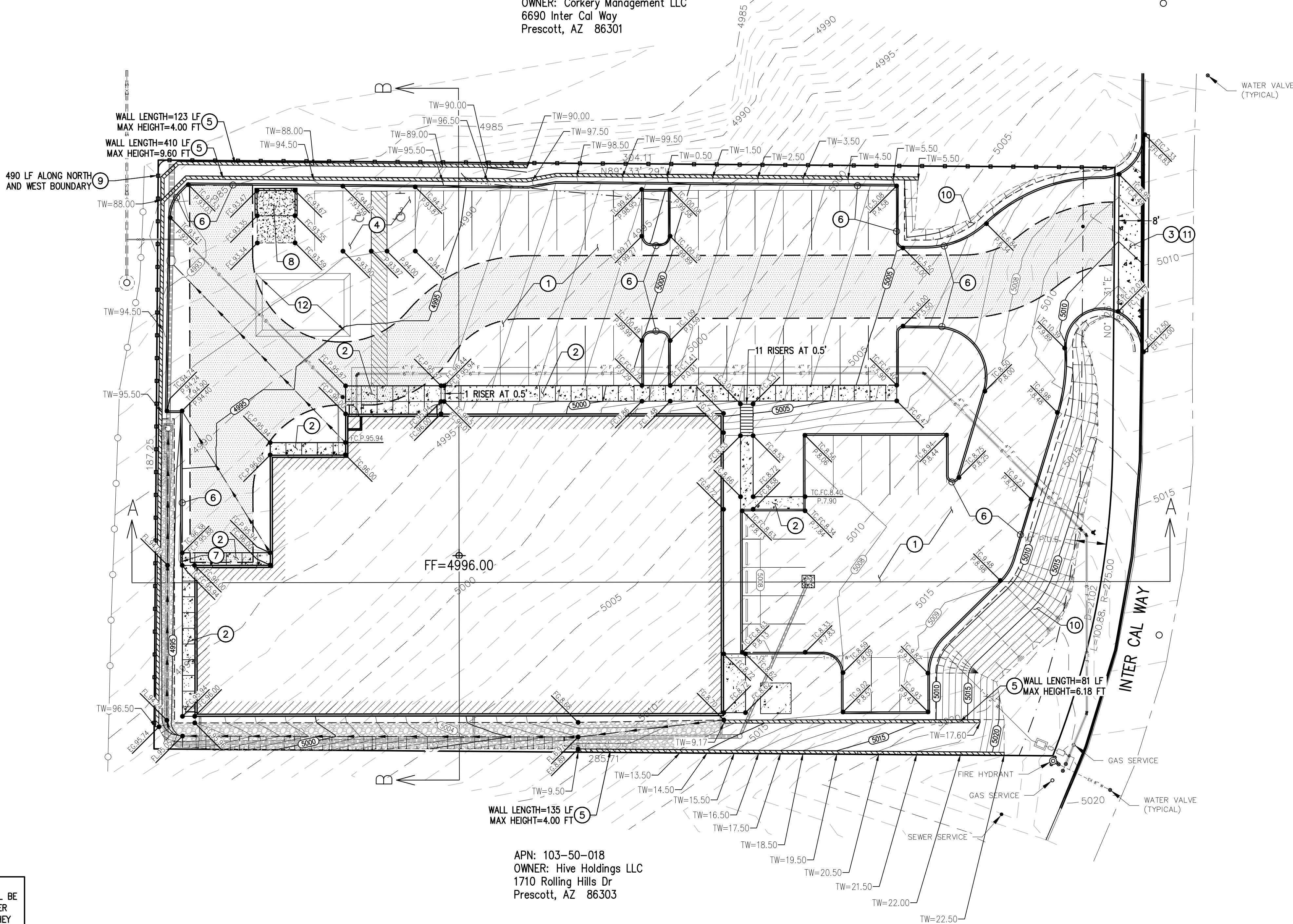
APN: 102-03-070
OWNER: Investment Potential LLC
1013 Lakeshore Blvd
Incline Village, NV 89451

APN: 103-50-018
OWNER: Hive Holdings LLC
1710 Rolling Hills Dr
Prescott, AZ 86303

APPROVED TRAFFIC CONTROL PLAN
AND R.O.W. PERMIT MUST BE
OBTAINED FROM COP PRIOR TO
BEGINNING WORK IN THE R.O.W.

SPECIAL NOTE:
EXISTING BOUNDARY CORNER MONUMENTS SHALL BE
PROTECTED IN PLACE. IF ANY BOUNDARY CORNER
MONUMENTS ARE DISTURBED OR DESTROYED, THEY
SHALL BE REPLACED IN ACCORDANCE WITH THE
ARIZONA BOUNDARY SURVEY MINIMUM STANDARDS.

SPECIAL NOTE:
THE TOP OF WALL (TW) GRADES SHOWN AND CALLED
OUT ON THE PLAN REPRESENT THE MINIMUM WALL
HEIGHT REQUIRED FOR THE GRADING PLAN. THE GRADES
SHOWN DO NOT ACCOUNT FOR ANY RETAINING WALL
DESIGN OR APPLICATION THEREOF RELATIVE TO FOOTING
ELEVATIONS, FOOTING AND/OR TOP OF WALL STEPS,
WALL CONSTRUCTION MATERIALS OR METHODS OR ANY
OTHER RETAINING WALL DESIGN ELEMENTS. THE
CONTRACTOR SHALL BE RESPONSIBLE FOR
INCORPORATING ANY RETAINING WALL DESIGN TO MEET
THE INTENT OF THE GRADES PER THIS PLAN.



GRADING AND PAVING KEY

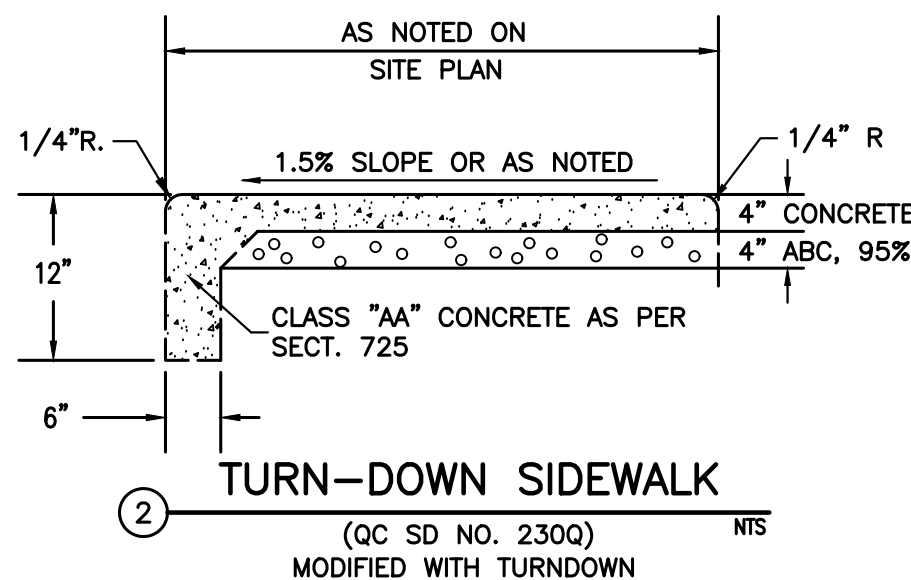
- FURNISH AND INSTALL 3" ASPHALT CONCRETE (AC) PAVING AND 6" AGGREGATE BASE COURSE (ABC) ON 8" OF PREPARED SUBGRADE PER COP STANDARDS AND PROJECT SOILS REPORT.
- CONSTRUCT CONCRETE SIDEWALK PER QC SD 2300 AND ARCHITECTURAL REQUIREMENTS (WIDTH PER ARCHITECTURAL SITE PLAN). CONSTRUCT TURN DOWN SIDEWALK WHERE SIDEWALK IS ADJACENT TO PAVEMENT, SEE BELOW FOR TURN-DOWN SIDEWALK DETAIL.
- CONSTRUCT CONCRETE RETURN TYPE DRIVEWAY ENTRANCE PER QC SD 2510.
- CONSTRUCT ADA COMPLIANT HANDICAP SPACE AND ACCESS AISLE WITH ADA HANDICAP EMBLEM, STRIPING, AND SIGNAGE PER ADA REQUIREMENTS AND ARCHITECTURAL DETAILS. MAXIMUM SLOPE IS 2% IN ANY DIRECTION.
- CONSTRUCT RETAINING WALL PER ARCHITECTURAL PLANS. PROVIDE HANDRAIL/FALL PROTECTION PER QC SD 1450, OR PER ARCHITECTURAL PLANS, WHERE ELEVATION DIFFERENCE IS 30" OR MORE.
- CONSTRUCT SINGLE CURB PER MAG SD 222, TYPE A.
- CONSTRUCT CURB TERMINATION PER MAG SD 222.
- CONSTRUCT SANITATION DUMPSTER ENCLOSURE PER COP SD 144P REQUIREMENTS AND PER ARCHITECTURAL SPECIFICATIONS.
- FURNISH AND INSTALL STRAW WATTLE PROTECTION ALONG TOE OF FILL SLOPE PER PLAN.
- LANDSCAPE DISTURBED GRADING LIMITS OR SLOPE STABILIZATION, INCLUDING HORIZONTAL SLOPE SCARIFICATION AND HYDROSEEDING, PER LANDSCAPE PLANS. 2H:1V SLOPES TYPICAL.
- CONSTRUCT 20'x30' TEMPORARY GRAVEL STABILIZED CONSTRUCTION ENTRANCE TO PREVENT TRACKING SOIL ONTO EXISTING PAVEMENT.
- CONSTRUCT 20'x30' TEMPORARY CONCRETE WASH OUT AREA WITH 6" MIN DEPRESSION TO PREVENT WASH OUT WATER FROM LEAVING THE SITE. WASH OUT AREA TO COMPLY WITH AAC R18-9-B301.LA.1.12.

LEGEND:

- EC EXISTING CONCRETE ELEVATION
- EFL EXISTING FLOW LINE ELEVATION
- EG EXISTING GROUND ELEVATION
- EP EXISTING PAVEMENT
- ETC EXISTING TOP OF CURB
- FC NEW FINISHED CONCRETE ELEVATION
- FF NEW FINISHED FLOOR ELEVATION
- FG NEW FINISHED GRADE ELEVATION
- FL NEW FLOWLINE ELEVATION
- G/B GRADE BREAK
- H/P HIGH POINT
- L/P LOW POINT
- P PAVEMENT OR SURFACE PER ARCH. PLANS
- SD STORM DRAIN
- TBC NEW TOP BACK OF CURB ELEVATION
- TC NEW TOP OF CURB ELEVATION
- TW NEW TOP OF WALL ELEVATION
- VC&G VERTICAL CURB AND GUTTER

- 3" AC, 95% ASTM D 1559, MAG 321
- 6" ABC, 95% ASTM D 698, MAG 310
- 8" MIN SUBGRADE, 95% ASTM D 698 MAG 301.

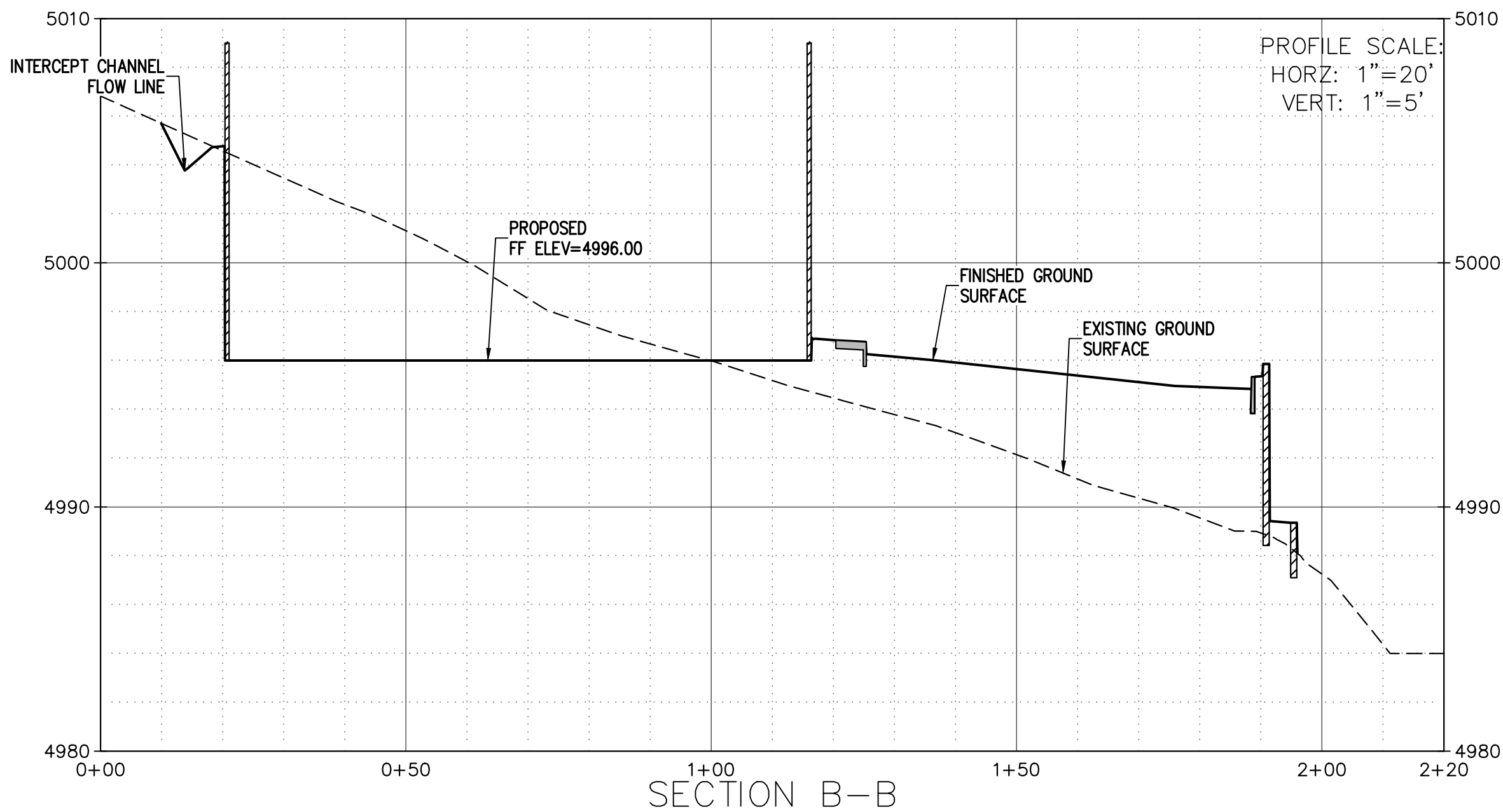
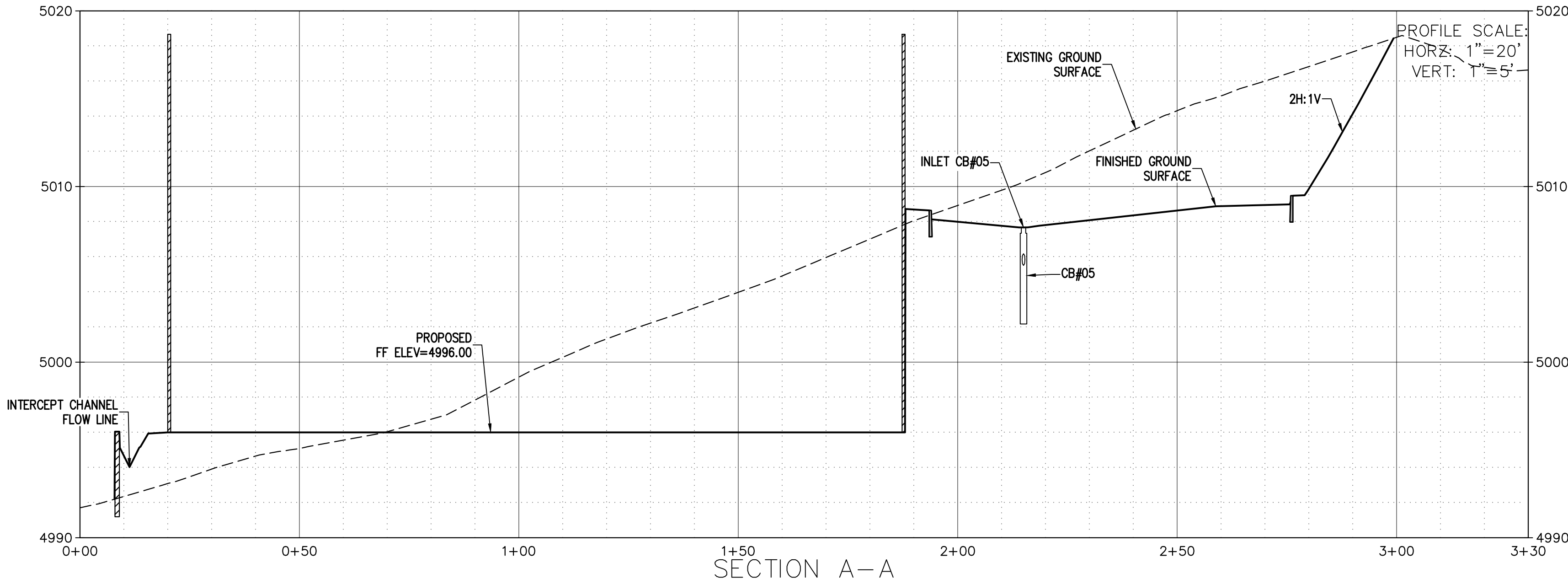
TYPICAL PAVEMENT
STRUCTURAL SECTION



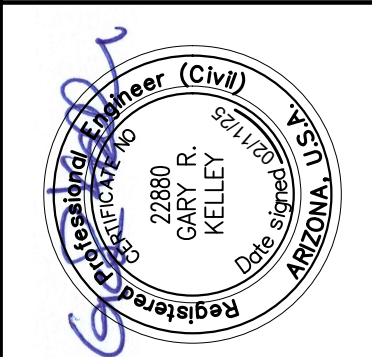
2		1/2" = 1'		DATE		REVISION		NO.		KELLEY/WISE ENGINEERING, INC.		146 GROVE AVENUE PRESCOTT, ARIZONA 86301 (928) 771-1730 FAX 778-2220 gkelley@kelley-wise.com	
DRAWN		DESIGN		CHECK		DATE		KWE JOB #		SHEET		C-101	
ZAJ		ZAJ		GRK		02/11/25		24-106				4 OF 10	

EUROPEAN TECHNIQUES 7
APN: 103-50-019
6686 INTER CAL WAY
PRESCOTT, AZ
GRADING PLAN

Professional Engineer (Civil)
GARY R. KELLEY
Arizona State Board of Professional Engineers and Surveyors
Date: 02/11/25



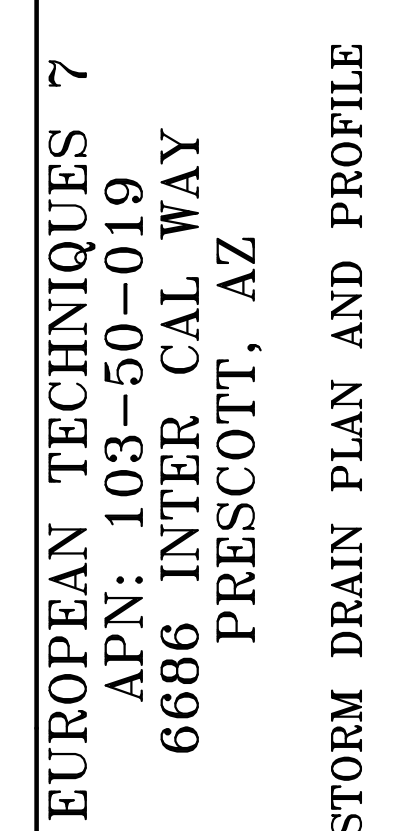
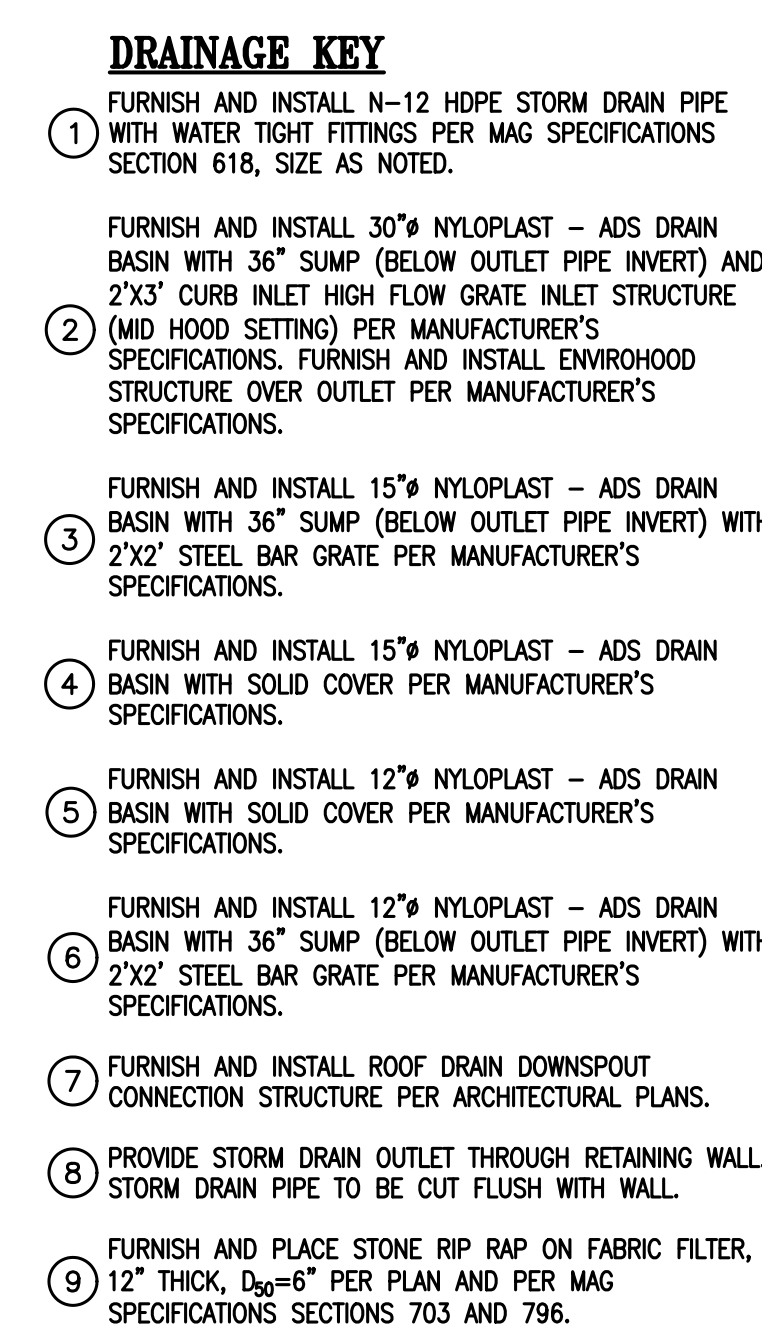
DRAWN	ZAJ
DESIGN	ZAJ
CHECK	GRK
DATE	02/11/25
KWE JOB #	24-106



EUROPEAN TECHNIQUES 7
APN: 103-50-019
6686 INTER CAL WAY
PRESCOTT, AZ
SECTION VIEWS

KELLEY/WISE ENGINEERING, INC.
146 GROVE AVENUE
PRESCOTT, ARIZONA 86301
(928) 771-1730
FAX 778-2220
gkelley@kelley-wise.com

NO.	REVISION	DATE	1/2" = 1"	2

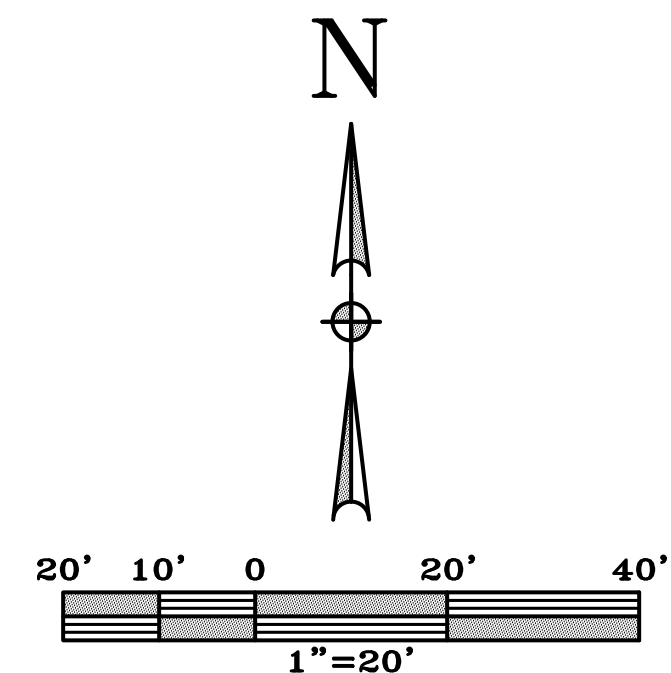
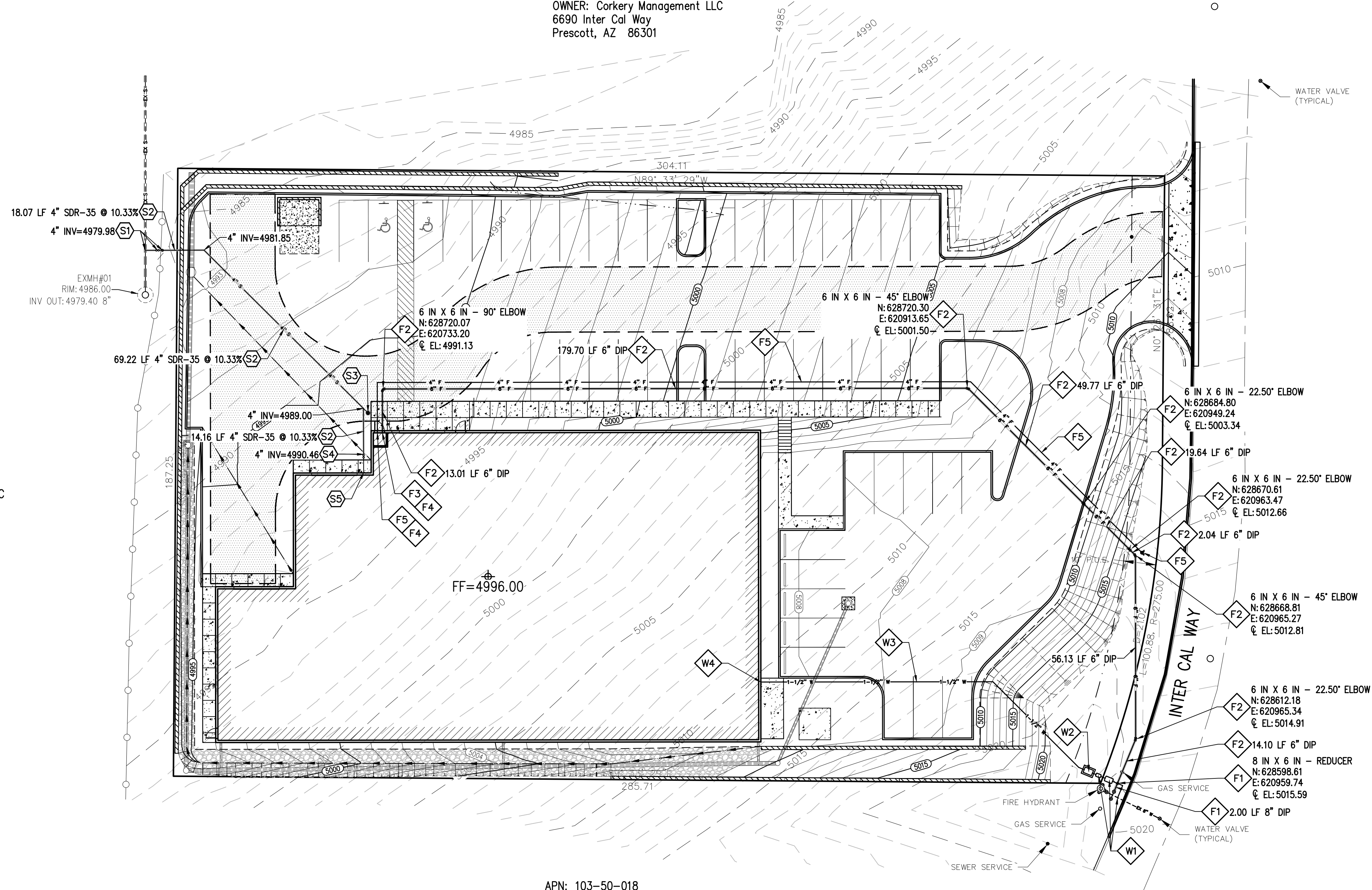


 KELLEY/WISE ENGINEERING, INC.	146 GROVE AVENUE PRESCOTT, ARIZONA 86301 (928) 771-1730 FAX 778-2220 gkelley@kelley-wise.com		NO.	REVISION	DATE	 1/2" 1"	2

DRAWN	ZAJ	ZAJ	24-106
DESIGN	ZAJ	GRK	02/11/25
CHECK		DATE	KWE JOB #
SHEET C-103 6 OF 10			

APN: 103-50-018
OWNER: Hive Holdings LLC
1710 Rolling Hills Dr
Prescott, AZ 86303

APN: 103-50-008D
OWNER: Corkery Management LLC
6690 Inter Cal Way
Prescott, AZ 86301



FIRE KEY

W1 FURNISH AND INSTALL 1" WATER SERVICE CONNECTION ON EXISTING WATER MAIN, 1" WATER METER BOX AND COVER PER QC SD 316P WITH CUSTOMER SHUTOFF AND PRESSURE REDUCING VALVES, TRENCH EXCAVATION AND BACKFILL PER QC SD 2000-1 AND PLAN DETAILS.

W2 FURNISH AND INSTALL COMPLETE 1" AMES LF2000BM1 (H ORIENTATION) BACKFLOW PREVENTION ASSEMBLY (BPA). ASSEMBLY PER QC SD 3240-1 AND INTERNATIONAL BUILDING CODE (IBC). NO INTERNATIONAL CONNECTION ALLOWED BETWEEN WATER METER AND BPA ASSEMBLY. THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS OF THE BPA ASSEMBLY AND ABOVE GROUND HOT BOX CLASS 1 PER ASSE 1060 PROTECTIVE ENCLOSURE PER IBC FOR SIGNED APPROVAL BY THE OWNER'S REPRESENTATIVE AND THE CITY OF PRESCOTT PRIOR TO INSTALLATION.

W3 FURNISH AND INSTALL 1 1/2" PRIVATE YARD LINE PER INTERNATIONAL PLUMBING CODE. TRENCH EXCAVATION AND BACKFILL PER QC SD 2000-1 AND PLAN DETAILS.

W4 EXACT LOCATION OF BUILDING CONNECTION PER PLUMBING PLANS.

A SEPARATE PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT PRIOR TO CONSTRUCTION OF THE PRIVATE UNDERGROUND FIRE MAIN. CONFIRM FIRE MAIN SIZE WITH BUILDING FIRE SPRINKLER DESIGN PLANS. BACKFLOW PROTECTION TO BE LOCATED IN THE FIRE RISER ROOM (DESIGN AND CONSTRUCTION BY OTHERS)

F1 CONNECT TO EXISTING 8" VALVE. FURNISH AND INSTALL 8" CLASS 350 RESTRAINED JOINT DUCTILE IRON WATER MAIN AND FULLY RESTRAINED 8"x6" REDUCER.

FURNISH AND INSTALL 6" (VERIFY SIZE WITH BUILDING FIRE SPRINKLER DESIGN) CLASS 350 RESTRAINED JOINT DUCTILE IRON FIRE MAIN WITH TRACE WIRE PER QC SD 319Q-1. TRENCH PER TYPICAL UTILITY TRENCH DETAIL 200Q-1. FURNISH AND INSTALL MECHANICALLY RESTRAINED JOINTS AT ALL JOINTS AND BENDS PER QC SD 303Q-1 AND 2.

F2

FURNISH AND INSTALL STAINLESS STEEL IN-BUILDING
FIRE RISER (VERIFY SIZE WITH BUILDING FIRE
SPRINKLER DESIGN BY OTHERS) WITH TESTABLE DOUBLE
CHECK VALVE AND BACKFLOW PREVENTION ASSEMBLY
PER QC SD 3240-1 AT BASE OF FIRE RISER. PROVIDE
1.5 FOOT MINIMUM HORIZONTAL CLEARANCE FROM
NEAREST WALL OR OTHER OBSTRUCTION AND 2 INCH
MINIMUM VERTICAL CLEARANCE ABOVE FLOOR TO
BOTTOM OF FLANGE. DOUBLE CHECK VALVE TO BE
SPECIFIED ON THE DEFERRED FIRE SPRINKLER PLAN
SUBMITTAL.

F4 EXACT LOCATION OF BUILDING SERVICE CONNECTIONS
PER FIRE SPRINKLER PLANS.

F5 FURNISH AND INSTALL 4" CLASS 350 RESTRAINED JOINT DUCTILE IRON REMOTE FDC PER FIRE SPRINKLER PLANS. KNOX CAPS TO BE ON HAND FOR FIRE DEPARTMENT FDC FLUSH. SEE DETAIL ON SHEET C-502.

(S1) FURNISH AND INSTALL DOUBLE BARREL TWO-WAY CLEANOUT AND BACKWATER VALVE PER QC SD 440P-1 AND 440P-3 WITH CAST IRON COVER PER QC SD 2700 ON EXISTING SEWER SERVICE. FIELD VERIFY EXACT PIPE SIZE, INVERT, LOCATION, MATERIAL, AND CONDITION PRIOR TO CONSTRUCTION.

(S2) FURNISH AND INSTALL 4" SDR-35 PVC PRIVATE BUILDING SEWER SERVICE PIPE, TRENCH EXCAVATION AND BACKFILL PER MAG SPECIFICATION 601 AND QC SD 200Q-1 UTILITY TRENCH DETAIL.

(S3) FURNISH AND INSTALL SEWER SERVICE CLEANOUT PER QC SD 441Q AND PER INTERNATIONAL PLUMBING CODE.

(S4) FURNISH AND INSTALL DOUBLE BUILDING SEWER CLEANOUTS PER PLUMBING PLANS AND CITY OF PRESCOTT REQUIREMENTS WITH CAST IRON COVER PER QC SD 270Q.

(S5) EXACT LOCATION OF BUILDING CONNECTION PER PLUMBING PLANS.

KELLEY/WISE ENGINEERING, INC.

EUROPEAN TECHNIQUES 7
APN: 103-50-010

APR. 103-30-019
6686 INTER CAL WAY
PRESCOTT, AZ

WATER, FIRE, AND SEWER PLAN

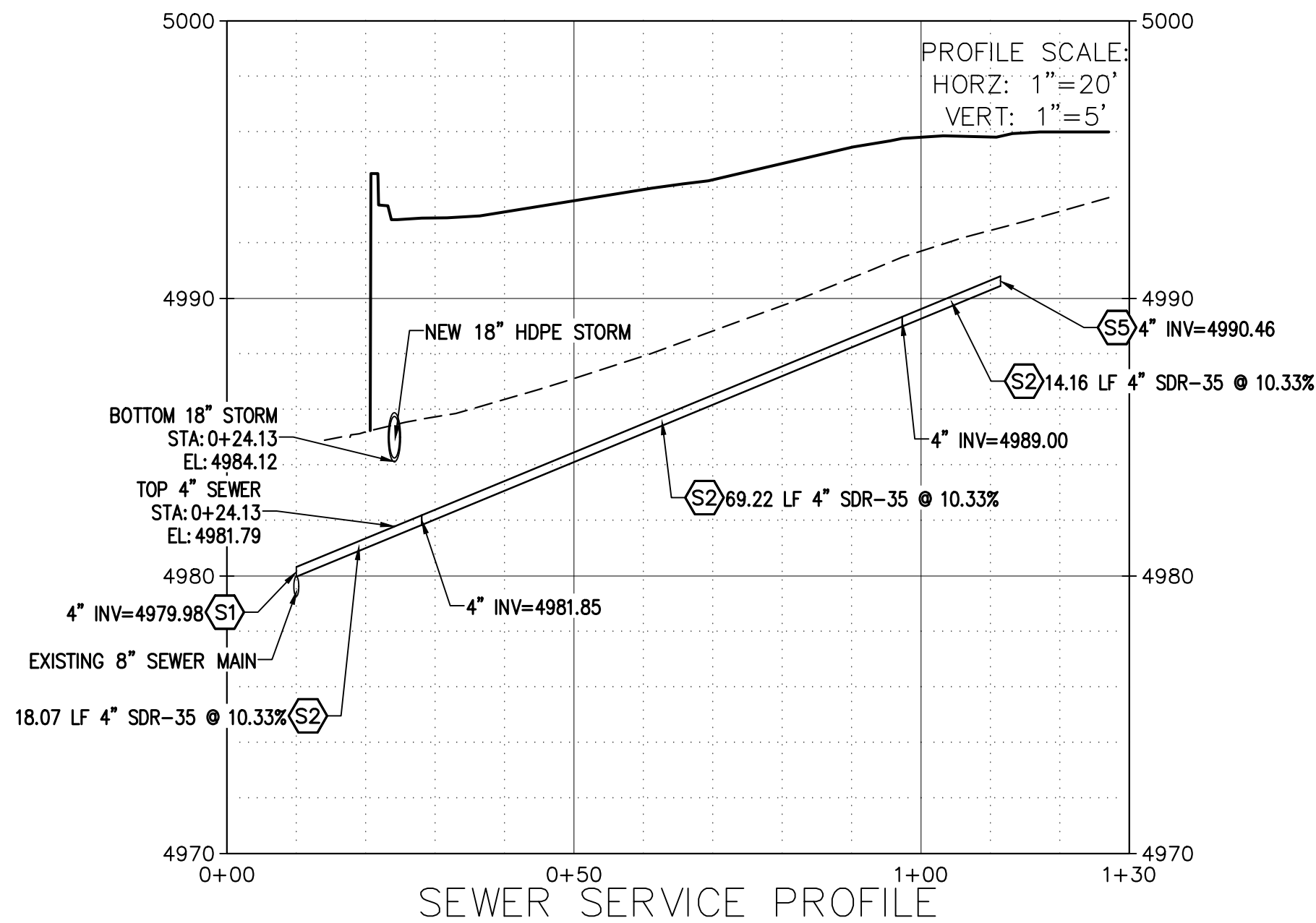
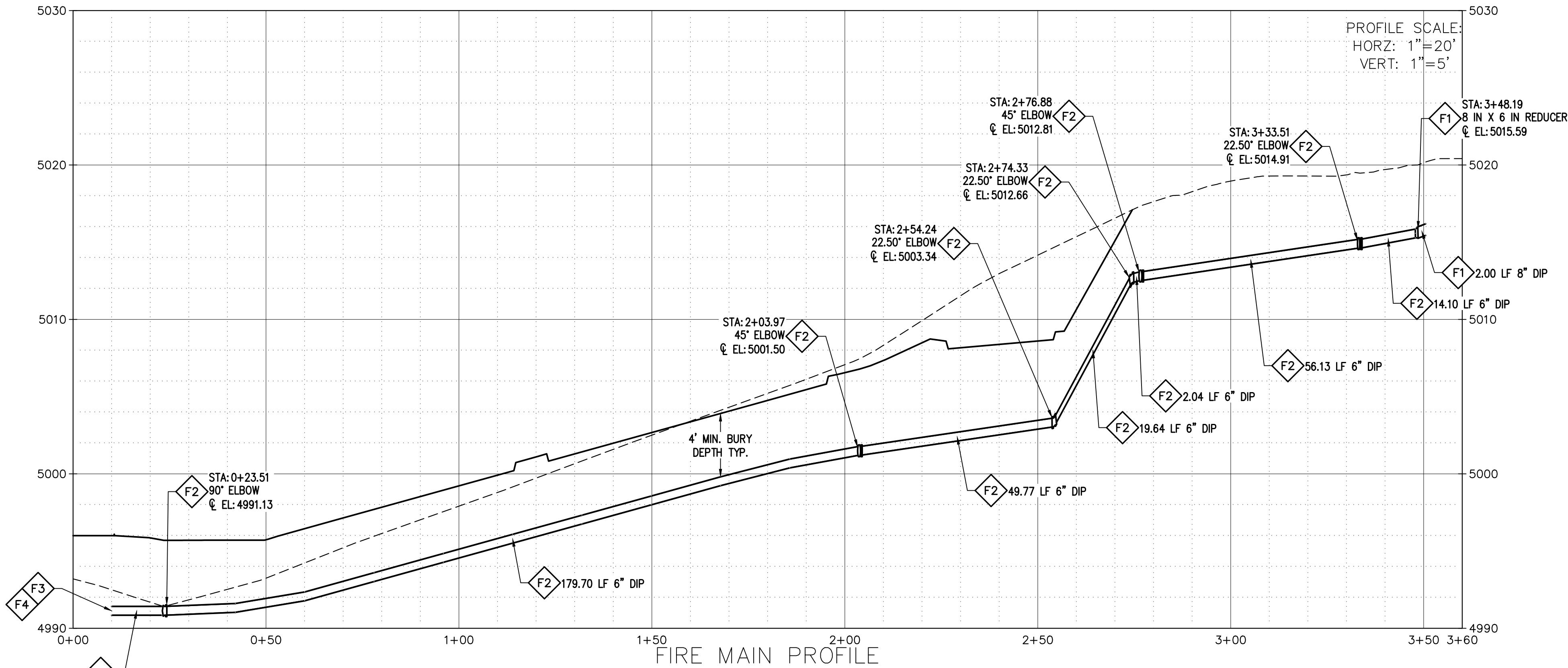
**CALL TWO WORKING DAYS
BEFORE YOU DIG**
(602) 263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

146 GROVE AVENUE
PRESCOTT, ARIZONA 86301
(928) 771-1730
FAX 778-2220
akellev@kellev-wise.com

DRAWN	ZAJ
DESIGN	ZAJ
CHECK	GRK
DATE	02/11/25
KWE JOB #	24-106

SHEET
C-201

7 OF 10



WATER KEY

- W1 FURNISH AND INSTALL 1" WATER SERVICE CONNECTION ON EXISTING WATER MAIN, 1" WATER METER BOX AND COVER PER QC SD 316P WITH CUSTOMER SHUTOFF AND PRESSURE REDUCING VALVES. TRENCH EXCAVATION AND BACKFILL PER QC SD 200Q-1 AND PLAN DETAILS.
- W2 FURNISH AND INSTALL COMPLETE 1" AMES LF2000BM1 (H ORIENTATION) BACKFLOW PREVENTION ASSEMBLY (BPA). ASSEMBLY PER QC SD 324Q-1 AND INTERNATIONAL BUILDING CODE (IBC). NO INTERCONNECTION ALLOWED BETWEEN WATER METER AND BPA ASSEMBLY. THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS OF THE BPA ASSEMBLY AND ABOVE GROUND HOT BOX CLASS 1 PER ASSE 1060 PROTECTIVE ENCLOSURE PER IBC FOR SIGNED APPROVAL BY THE OWNER'S REPRESENTATIVE AND THE CITY OF PRESCOTT PRIOR TO INSTALLATION.
- W3 FURNISH AND INSTALL 1-1/2" PRIVATE YARD LINE PER INTERNATIONAL PLUMBING CODE. TRENCH EXCAVATION AND BACKFILL PER QC SD 200Q-1 AND PLAN DETAILS.
- W4 EXACT LOCATION OF BUILDING CONNECTION PER PLUMBING PLANS.

FIRE KEY

- F1 A SEPARATE PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT PRIOR TO CONSTRUCTION OF THE PRIVATE UNDERGROUND FIRE MAIN. CONFIRM FIRE MAIN SIZE WITH BUILDING FIRE SPRINKLER DESIGN PLANS. BACKFLOW PROTECTION TO BE LOCATED IN THE FIRE RISER ROOM (DESIGN AND CONSTRUCTION BY OTHERS)
- F2 CONNECT TO EXISTING 8" VALVE. FURNISH AND INSTALL 8" CLASS 350 RESTRAINED JOINT DUCTILE IRON WATER MAIN AND FULLY RESTRAINED 8"x6" REDUCER.
- F3 FURNISH AND INSTALL 6" (VERIFY SIZE WITH BUILDING FIRE SPRINKLER DESIGN) CLASS 350 RESTRAINED JOINT DUCTILE IRON FIRE MAIN WITH TRACE WIRE PER QC SD 319Q-1. TRENCH PER TYPICAL UTILITY TRENCH DETAIL 200Q-1. FURNISH AND INSTALL MECHANICALLY RESTRAINED JOINTS AT ALL JOINTS AND BENDS PER QC SD 303Q-1 AND 2.
- F4 FURNISH AND INSTALL STAINLESS STEEL IN-BUILDING FIRE RISER (VERIFY SIZE WITH BUILDING FIRE SPRINKLER DESIGN BY OTHERS) WITH TESTABLE DOUBLE CHECK VALVE AND BACKFLOW PREVENTION ASSEMBLY PER QC SD 324Q-1 AT BASE OF FIRE RISER. PROVIDE 1.5 FOOT MINIMUM HORIZONTAL CLEARANCE FROM NEAREST WALL OR OTHER OBSTRUCTION AND 2 INCH MINIMUM VERTICAL CLEARANCE ABOVE FLOOR TO BOTTOM OF FLANGE. DOUBLE CHECK VALVE TO BE SPECIFIED ON THE DEFERRED FIRE SPRINKLER PLAN SUBMITTAL.
- F5 EXACT LOCATION OF BUILDING SERVICE CONNECTIONS PER FIRE SPRINKLER PLANS.
- F6 FURNISH AND INSTALL 4" CLASS 350 RESTRAINED JOINT DUCTILE IRON REMOTE FDC PER FIRE SPRINKLER PLANS. KNOX CAPS TO BE ON HAND FOR FIRE DEPARTMENT FDC FLUSH. SEE DETAIL ON SHEET C-502.

SEWER KEY

- S1 FURNISH AND INSTALL DOUBLE BARREL TWO-WAY CLEANOUT AND BACKWATER VALVE PER QC SD 440P-1 AND 440P-3 WITH CAST IRON COVER PER QC SD 270Q ON EXISTING SEWER SERVICE. FIELD VERIFY EXACT PIPE SIZE, INVERT, LOCATION, MATERIAL, AND CONDITION PRIOR TO CONSTRUCTION.
- S2 FURNISH AND INSTALL 4" SDR-35 PVC PRIVATE BUILDING SEWER SERVICE PIPE, TRENCH EXCAVATION AND BACKFILL PER MAG SPECIFICATION 601 AND QC SD 200Q-1 UTILITY TRENCH DETAIL.
- S3 FURNISH AND INSTALL SEWER SERVICE CLEANOUT PER QC SD 441Q AND PER INTERNATIONAL PLUMBING CODE.
- S4 FURNISH AND INSTALL DOUBLE BUILDING SEWER CLEANOUTS PER PLUMBING PLANS AND CITY OF PRESCOTT REQUIREMENTS WITH CAST IRON COVER PER QC SD 270Q.
- S5 EXACT LOCATION OF BUILDING CONNECTION PER PLUMBING PLANS.

2	
1/2" 1"	
DATE	
REVISION	
NO.	
KELLEY/WISE ENGINEERING, INC.	
146 GROVE AVENUE PRESCOTT, ARIZONA 86301 (928) 771-1730 FAX 778-2220 gkelley@kelley-wise.com	
EUROPEAN TECHNIQUES 7 APN: 103-50-019 6686 INTER CAL WAY PRESCOTT, AZ FIRE AND SEWER PROFILES	
DRAWN	ZAJ
DESIGN	ZAJ
CHECK	GRK
DATE	02/11/25
KWE JOB #	24-106
SHEET C-201 8 OF 10	



ENGINEERING & TESTING CONSULTANTS INC.

February 24, 2025

W. Alan Kenson & Associates, P.C.
Attn: Mr. Alan Kenson
P.O. Box 11593
Prescott, AZ 86304

SUBJECT: **VERSA-LOK RETAINING WALL – 6686 INTER CAL WAY,
PRESCOTT, AZ**

Dear Mr. Kenson:

Engineering & Testing Consultants, Inc. (ETC), has prepared this letter to provide recommendations for the proposed new Versa-Lok retaining walls for the above referenced project.

ETC prepared the geotechnical soils report for the project, dated July 12, 2007.

From the information provided to us, we understand that generally, the northwest half of the property will be raised to grade using Versa-Lok retaining walls. Versa-Lok retaining walls will also be used against the cut slope in the southeast side of the site.

The proposed retaining walls will primarily be used along parking lot and driveway areas of the site. The retaining walls are situated somewhat closer to the building area in the southwest side of the site where the depth of fill will be shallower.

GEOTECHNICAL ENGINEERING • SOILS & MATERIALS TESTING • SPECIAL INSPECTION

417 NORTH ARIZONA AVENUE • PRESCOTT, ARIZONA 86301
928-778-9001



W. Alan Kenson & Associates, P.C.
Geotechnical Engineering Services – Versa-Lok Retaining Walls at 6686 Inter Cal Way
Prescott, Arizona
February 24, 2025
Page 2 of 4

VERSA-LOK RETAINING WALLS

Retaining wall design was performed utilizing the computer application SRWall v5.0.1, with strength properties of the wall components provided by Versa-Lok.

ETC is recommending the retaining walls utilize Versa-Lok Standard block units and Versa-Grid VG 3.0. Acceptable geogrid alternatives include **SRW 5 Series**.

Typical wall sections are presented in Appendix A.

The Versa-Lok retaining walls shall be constructed in accordance with all Versa-Lok installation and construction procedures. The walls shall be constructed using the ¼" setback installation between each course.

Per Versa-Lok, the foundation block units shall be seated on a minimum 6-inch leveling pad construction of compacted aggregate base course (ABC), 24 inches wide. The exposed ground surface beneath the leveling pad shall be scarified, moisture conditioned, and thoroughly compacted prior to placement of the compacted ABC leveling pad.

ETC shall be contacted to observe compacted foundation excavations to verify bearing soils and dimensions conform to our recommendations presented herein.

For all wall heights, the initial, lower geogrid layer shall be located at the bottom of the wall drain, typically between the second and third course. The number and length of geogrid layers shall be in conformance with the Geogrid Reinforcement Schedule in Appendix A, and the separation between geogrid layers shall not exceed a maximum of 24 inches, or four block courses. Where an additional geogrid layer is required to meet the Geogrid Reinforcement Schedule, it is recommended to place the additional layer 12 inches above the initial geogrid layer.

In accordance with the Manufacturer's guidelines, wall drains with drainage aggregate shall be installed behind the retaining wall. Drainage aggregate shall consist of relatively clean, sound, ¾" angular gravel, such as "concrete gravel," or Size 57 aggregate. The bottom of the drainage aggregate behind the wall shall begin near the same height as finished grade on the front side of the wall. Aggregate shall not be placed behind block units imbedded below grade. Aggregate shall extend up, at least 12 inches wide, behind the walls. The top of the drainage aggregate shall be capped with 12 to 24 inches of compacted native fill soil.

ETC 12888



W. Alan Kenson & Associates, P.C.
Geotechnical Engineering Services – Versa-Lok Retaining Walls at 6686 Inter Cal Way
Prescott, Arizona
February 24, 2025
Page 3 of 4

A 4-inch diameter perforated drain pipe shall be installed at the bottom of the gravel drain, piped to drain at intervals not exceeding 40 feet. If filter fabric is not used between the gravel drain and reinforced granular backfill, a filter sock shall be installed on the perforated drain pipe.

For tiered retaining walls, the geogrid lengths for the lower retaining wall (Detail B) shall extend back to match the end of the geogrid layers used for the upper tiered wall (Detail A), per the details in Appendix A.

We understand Versa-Lok walls proposed against cut slopes will not exceed a maximum exposed height of 4 feet. Geogrid is not required for Versa-Lok retaining walls constructed against cut slopes, up to 4 feet or less in height. However, geogrid layers are still required for retaining walls supporting compacted fill, per the Geogrid Reinforcement Schedule in Appendix A.

Any fences, railings, or traffic barriers that may be required, shall be installed in accordance with Technical Bulletin #8 published by Versa-Lok.

OTHER CONSIDERATIONS

Granular, non-expansive, engineered fill material shall be utilized for wall backfill within the limits of the geogrid reinforcement, approved by the engineer.

Compacted native soils should be used for backfill of the embedded block courses, up to the bottom elevation of the gravel drain. Compacted native soils should also be used to cap the gravel drain using filter fabric between the compacted soil cap material and the drain gravel.

In accordance with the soils report, native soils may be used for compacted fill beyond the extent of the geogrid reinforcement zone, as needed.

Engineered fill used within the geogrid reinforced backfill zone shall be clean, non-expansive soil free of vegetation, debris, organic soil, and gravel larger than six inches (4") in size. Engineered fill shall be granular material with no more than 36 percent silt and clay fines (percent minus No. 200 sieve) and a maximum plasticity index of 15. Proposed engineered fill shall be approved by the engineer prior to use.

All fill soils should be placed in horizontal lifts not exceeding 8 inches compacted thickness. Foundation soils and all granular backfill soils shall be compacted to a minimum relative density of 95% maximum dry density at –2% to +2% of optimum moisture, ASTM D698.

ETC 12888



W. Alan Kenson & Associates, P.C.
Geotechnical Engineering Services – Versa-Lok Retaining Walls at 6686 Inter Cal Way
Prescott, Arizona
February 24, 2025
Page 4 of 4

One of the primary causes of wall failure is inadequate drainage behind the wall, or against the toe of wall. Therefore, surface drainage shall prevent ponding of surface water near the retaining walls, and/or the saturation of backfill/foundation soils.

ETC recommends the observation of the site grading operation with sufficient scheduled compaction tests to verify proper compaction density. During construction, separate inspections shall be scheduled for backfill compaction and geogrid placement, to be performed by the engineer.

For your use. Should you have any questions or concerns, please contact us at (928) 778-9001.

Sincerely,

ENGINEERING & TESTING CONSULTANTS, INC.



Michael P. Wilson, P.E.
Project Engineer



Reviewed by: Richard G. Kelley, P.E.
Project Manager

Attachment: Appendix A – Typical Section Details

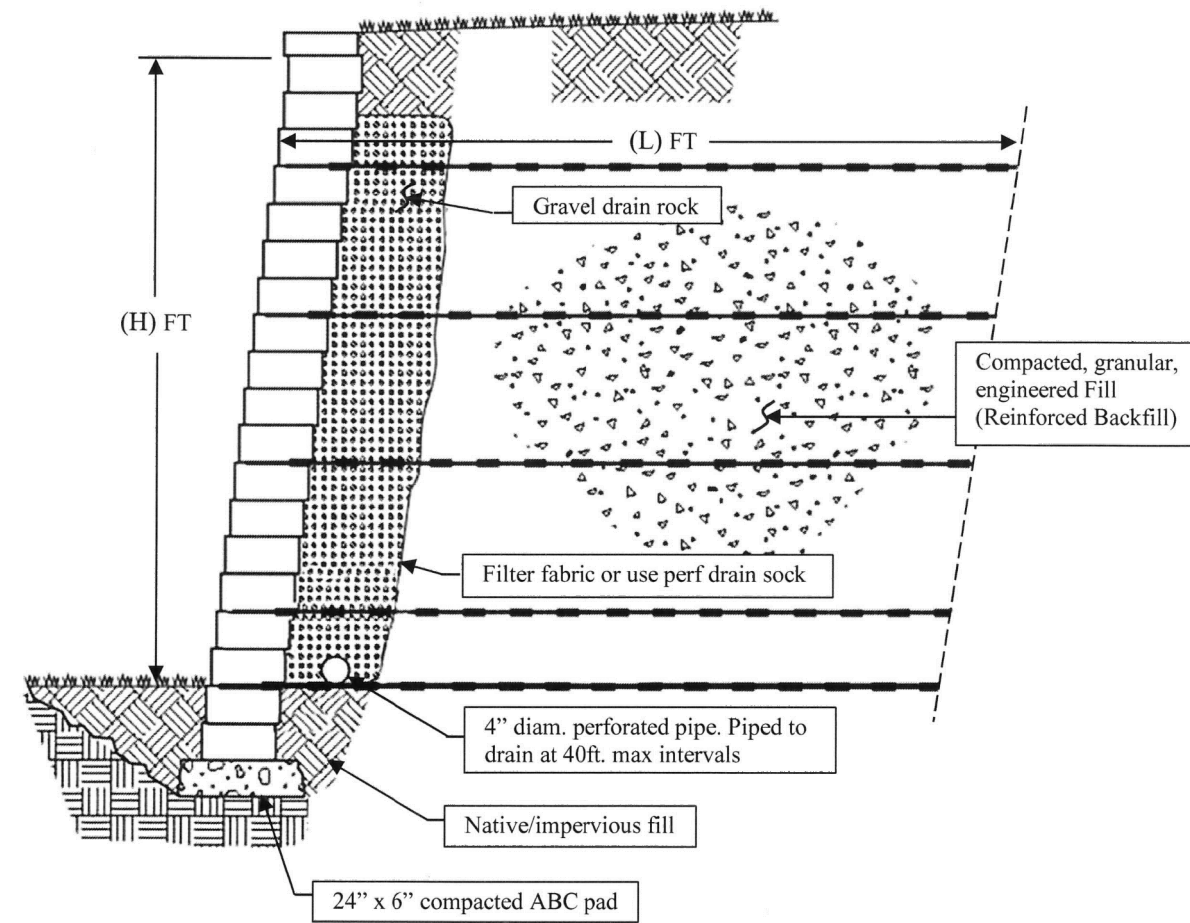
cc: ETC File 12888

ETC 12888

APPENDIX A

TYPICAL WALL SECTIONS

GEOGRID REINFORCEMENT SCHEDULE					
Wall Height (H)	Grid Length (L)	Min. Number of Grid Layers	Type of Geogrid	Min. Number of Blocks Embedded	Max Number of Blocks Above Top Grid Layer
4	4	2	VG-3.0	1	4
6	5.5	4	VG-3.0	2	4
8	6.5	5	VG-3.0	2	4
10	8	6	VG-3.0	2	4



A Versa-Lok Retaining Wall Detail

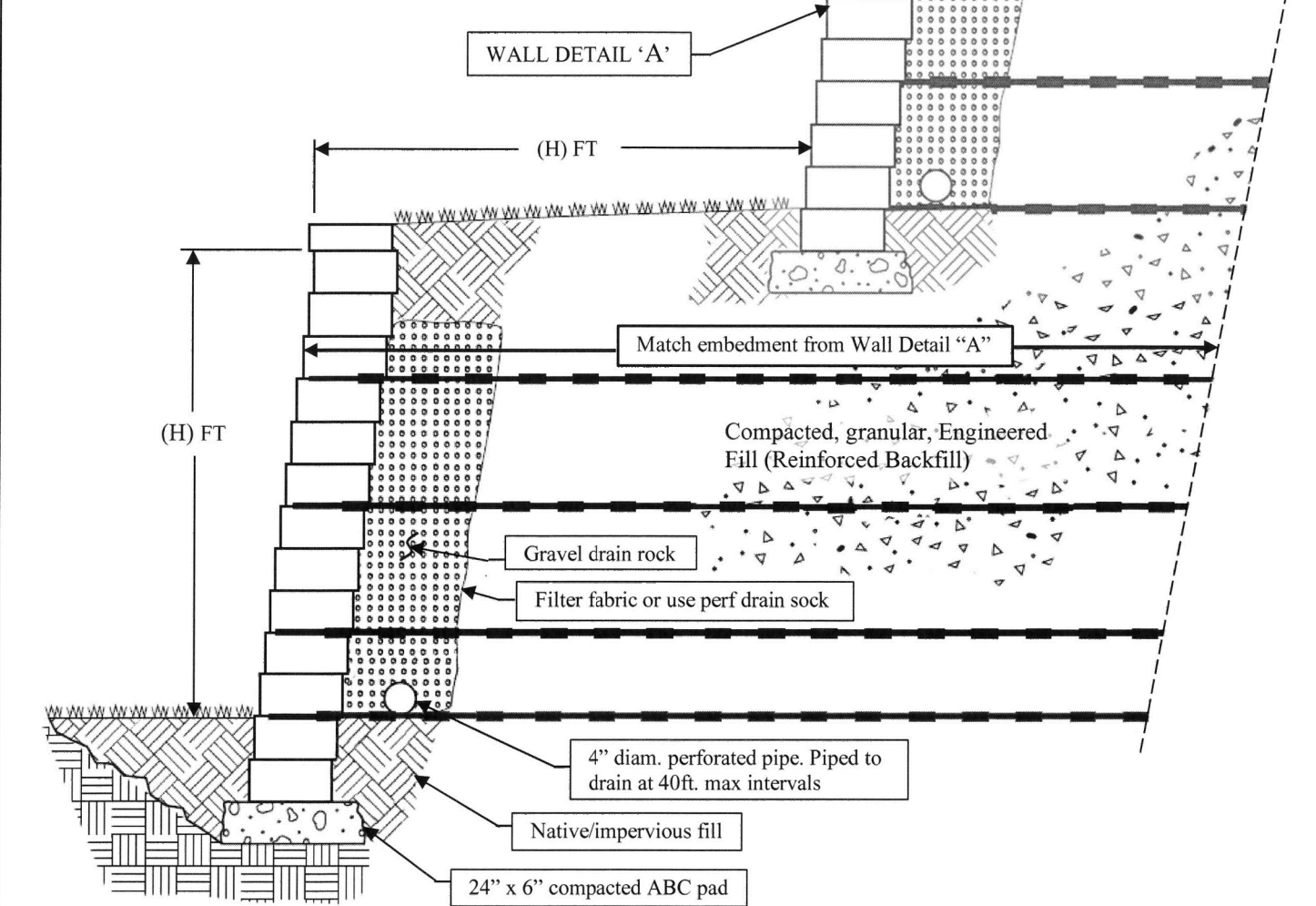
Engineering & Testing Consultants, Inc.
•Subsurface Drilling •Geotechnical •Environmental Support
Drawn by: MPW Date: 02/21/25
Project No: ETC 12888 Page No:

DETAIL A
VERSA-LOK RETAINING WALL
European Techniques 7
Prescott, AZ



GEOGRID REINFORCEMENT SCHEDULE				
Wall Height (H)	Min. Number of Grid Layers	Type of Geogrid	Min. Number of Blocks Embedded	Max Number of Blocks Above Top Grid Layer
4	2	VG-3.0	1	4
6	4	VG-3.0	2	4
8	5	VG-3.0	2	4
10	6	VG-3.0	2	4

*Grid lengths for lower tier – Match upper tier reinforcement as shown



B Tiered Versa-Lok Retaining Wall Detail

Engineering & Testing Consultants, Inc.
•Subsurface Drilling •Geotechnical •Environmental Support
Drawn by: MPW Date: 02/21/25
Project No: ETC 12888 Page No:

DETAIL B
TIERED VERSA-LOK WALLS
European Techniques 7
Prescott, AZ



REVISIONS

BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.

W. Alan Kenson & Associates, P.C.



P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.wkenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Segmental Wall

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY
L.O.

CHECKED BY
W.A.K.

DATE
February 25th, 2025

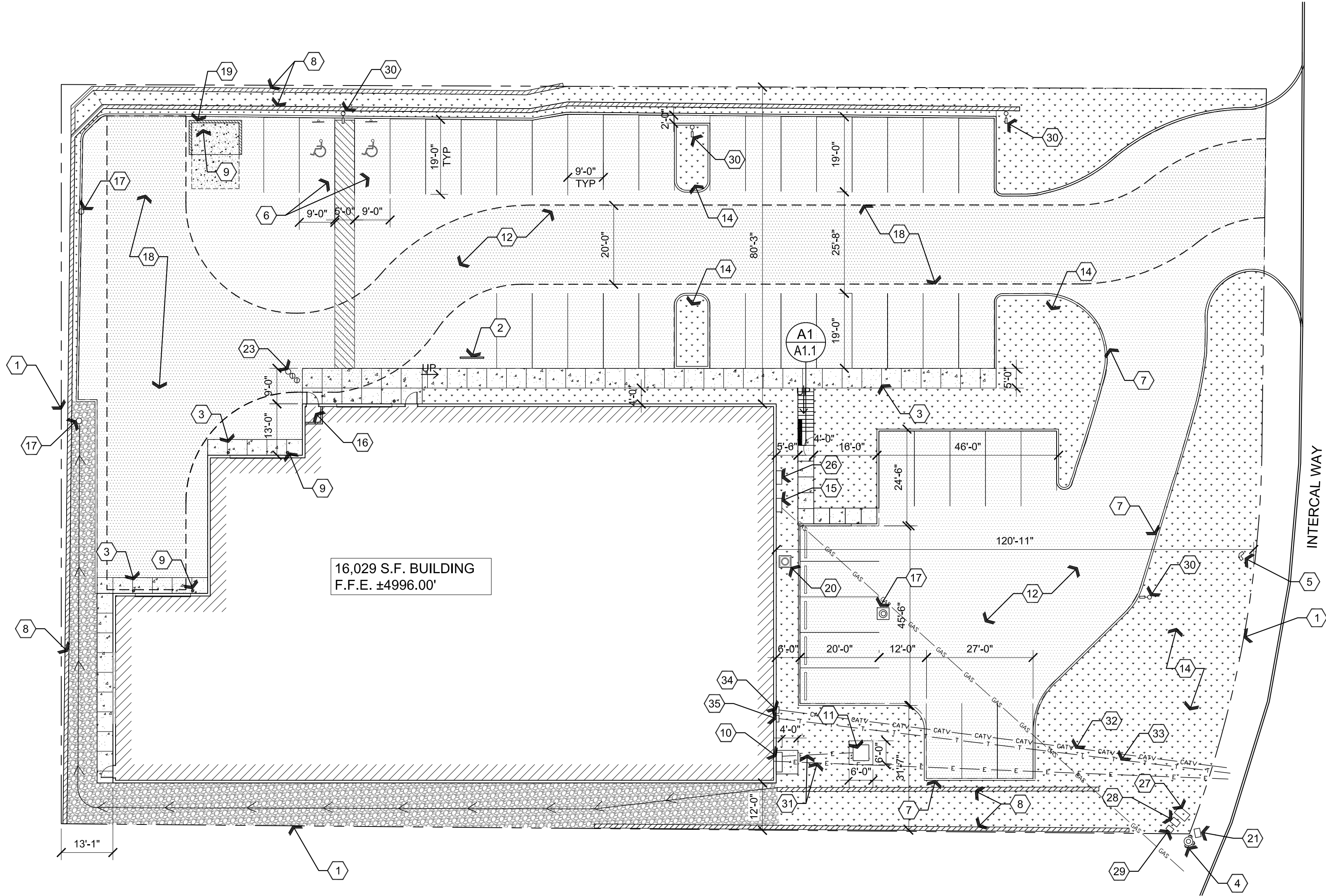
JOB NO.
803

SHEET

SW1

Mar 12, 2025 - 1:57pm

A1 Architectural / Partial Utilities Site Plan



Scale: 1"=20'-0"



Descriptive Keynotes

1. PROPERTY LINE.
2. PROVIDE BIKE RACK.
3. PROVIDE CONCRETE PAVEMENT OVER COMPACTED A.B.C. , REFER TO CIVIL PLANS.
4. EXISTING FIRE HYDRANT.
5. PROPOSED FDC.
6. PROVIDE ADA ACCESSIBLE PARKING. REFER TO DETAIL D1/A1.1 AND D2/A1.1.
7. PROVIDE CAST IN PLACE CONCRETE CURB, REFER TO CIVIL PLANS.
8. PROVIDE SEGMENTAL WALL, REFER TO SEGMENTAL WALL PLANS.
9. PROVIDE 6'-0" LONG, 4" DIAMETER, CONCRETE FILLED, PROTECTIVE STEEL BOLLARDS, EMBEDDED 2'-0" BELOW GRADE INTO CONCRETE FOOTING, TYPICAL AT EACH ROLL-UP DOOR AND AS INDICATED ELSEWHERE.
10. PROVIDE ELECTRICAL SERVICE ENTRANCE SECTION.
11. PROPOSED ELECTRICAL TRANSFORMER ON CONCRETE PAD.
12. PROVIDE ASPHALTIC PAVEMENT, REFER TO CIVIL PLANS.
13. PROPOSED PARKING SPACE, TYPICAL.
14. PROPOSED LANDSCAPE AREA, REFER TO LANDSCAPE PLAN.
15. PROVIDE NATURAL GAS METER / REGULATOR.
16. FIRE RISER ROOM.
17. PROVIDE INLET STRUCTURE. REFER TO CIVIL PLANS.
18. FIRE DEPARTMENT ACCESS.
19. PROVIDE TRASH DUMPSTER ENCLOSURE. REFER TO DETAIL A1/A1.2.
20. PROVIDE HVAC CONDENSER UNIT, REFER TO MECHANICAL PLANS.
21. PROVIDE DOMESTIC WATER METER.
22. PROVIDE WATER SHUT OFF VALVE.
23. PROVIDE TWO WAY SEWER CLEANOUT AND BACKWATER VALVE.
24. PROVIDE CABLE TV TERMINAL BOX.
25. PROVIDE TELEPHONE TERMINAL BOX.
26. PROVIDE LANDSCAPE TIMER.
27. PROVIDE REDUCED PRESSURE BACKFLOW PREVENTION DEVICE IN ASSE HOT BOX.
28. PROVIDE DRIP IRRIGATION SYSTEM BACKFLOW PREVENTOR IN HOT BOX.
29. PROVIDE 3/4" VALVED SCHEDULE 40 PVC STUB-OUT IN BELOW GRADE YARD BOX FOR LANDSCAPE IRRIGATION SYSTEM.
30. PROVIDE LIGHT FIXTURE, REFER TO ELECTRICAL PLANS.
31. PROPOSED DB 120 ELECTRICAL CONDUIT.
32. PROPOSED DB 120 CATV CONDUIT.
33. PROPOSED DB 120 TELEPHONE CONDUIT.
34. PROPOSED CABLE TV TERMINAL BOX.
35. PROPOSED TELEPHONE TERMINAL BOX.

Legend

- LANDSCAPE AREA
- ABC OVER SUBGRADE
- CONCRETE
- RIP RAP

PARKING CALCULATIONS

LIGHT MANUFACTURING
OFFICE = 1 PER 300 S.F.
868 S.F. / 300 S.F. = 3 SPACES
WORK / STORAGE / OTHER 1 PER 750 S.F.
14,295 S.F. / 750 S.F. = 19 PARKING SPACES
TOTAL PARKING SPACES REQUIRED =22
TOTAL PARKING SPACES PROVIDED = 45

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Architectural / Partial Utilities Site Plan

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

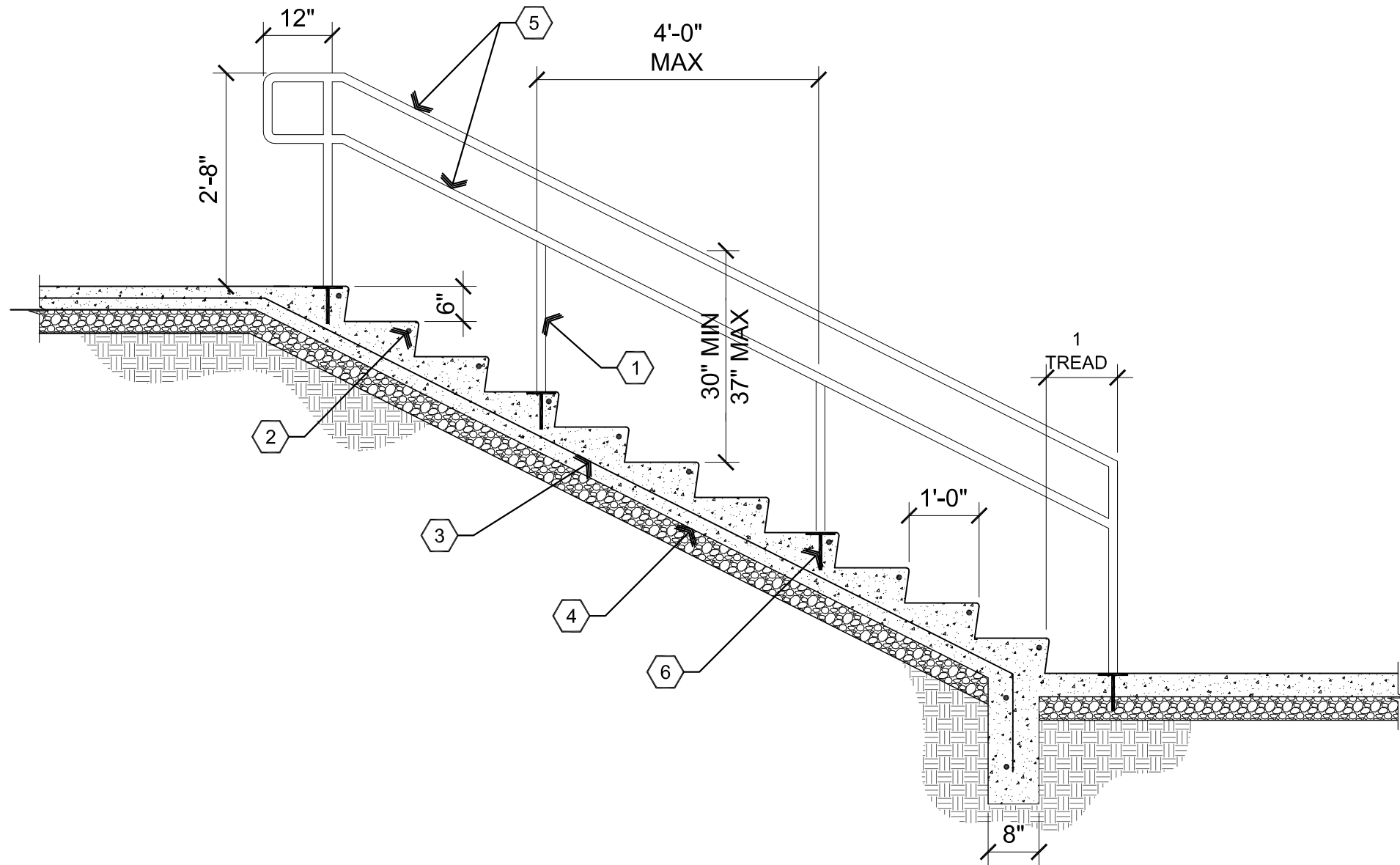
DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB. NO. 803
SHEET

A1.0

Feb 25, 2025 • 10:51am

Descriptive Keynotes

- 1 1/2" DIAMETER SCHEDULE 40 STEEL PIPE BALUSTERS WELDED TO STRINGER.
- #3 REBAR AT EACH STAIR NOSING.
- #3 REBAR @ 1'-0" O.C. EACH WAY.
- CONCRETE STAIRWAY OVER COMPACTED A.B.C.
- 1 1/2" HIGH STRENGTH STEEL HANDRAIL MOUNTED TO BALUSTERS.
- 4" x 4" x 1/2" STEEL PLATE WITH 6" LONG x 1/2" HEADED STUD EMBEDDED INTO CONCRETE.

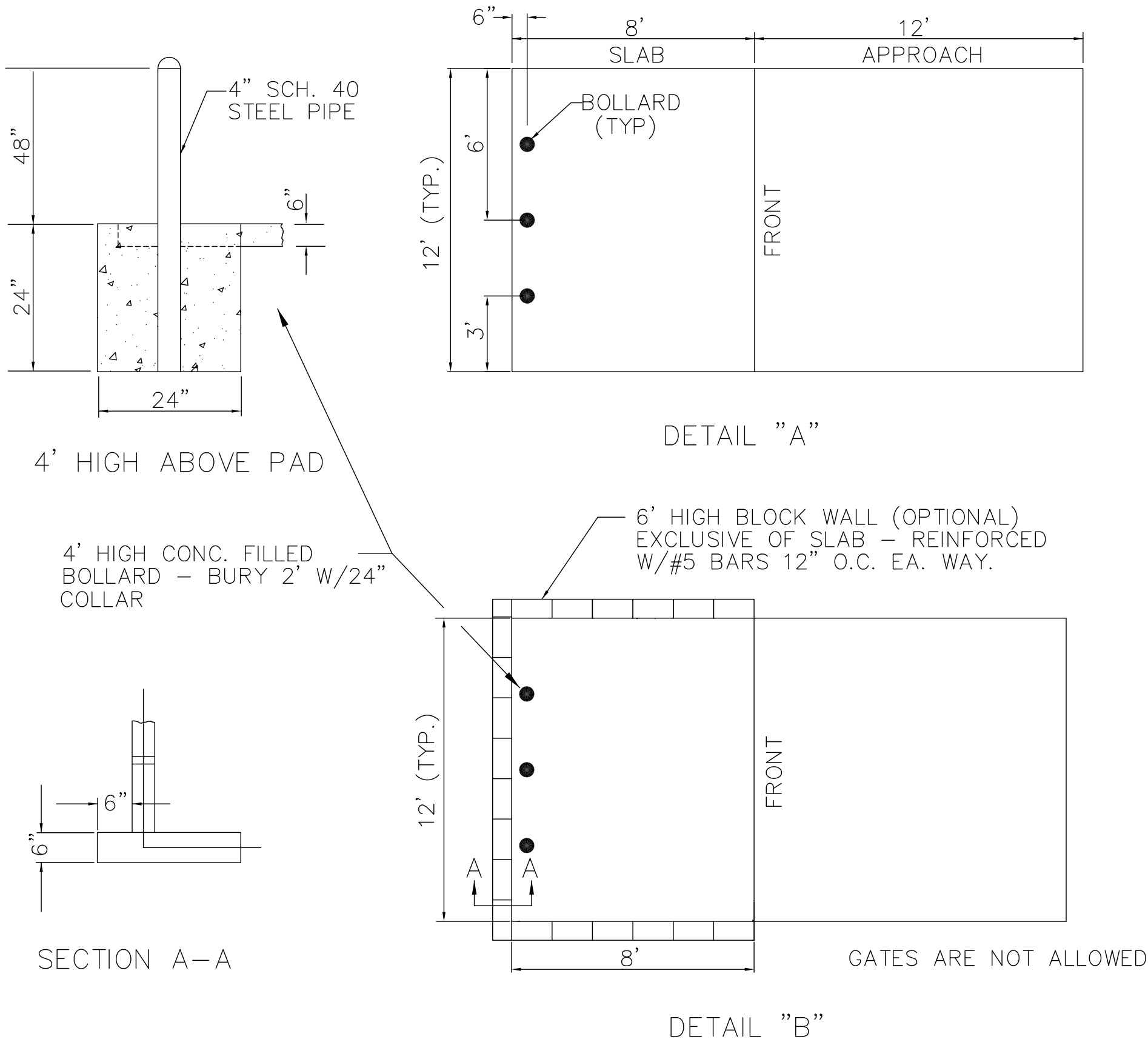


A1 Site Stair Section

Scale: 1/2"=1'-0"

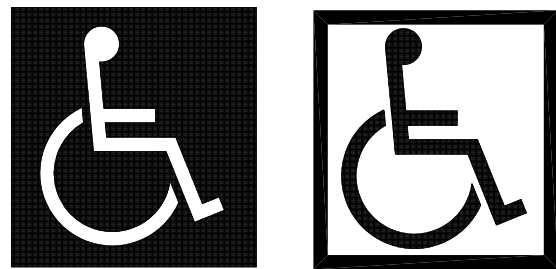
COP STANDARD DETAIL

DETAIL NO.
4-15P

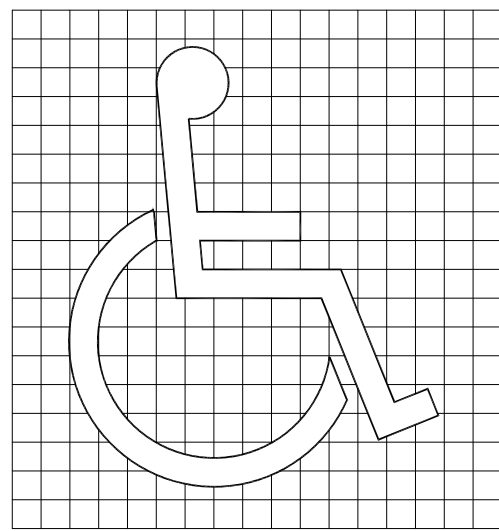


SLAB DATA

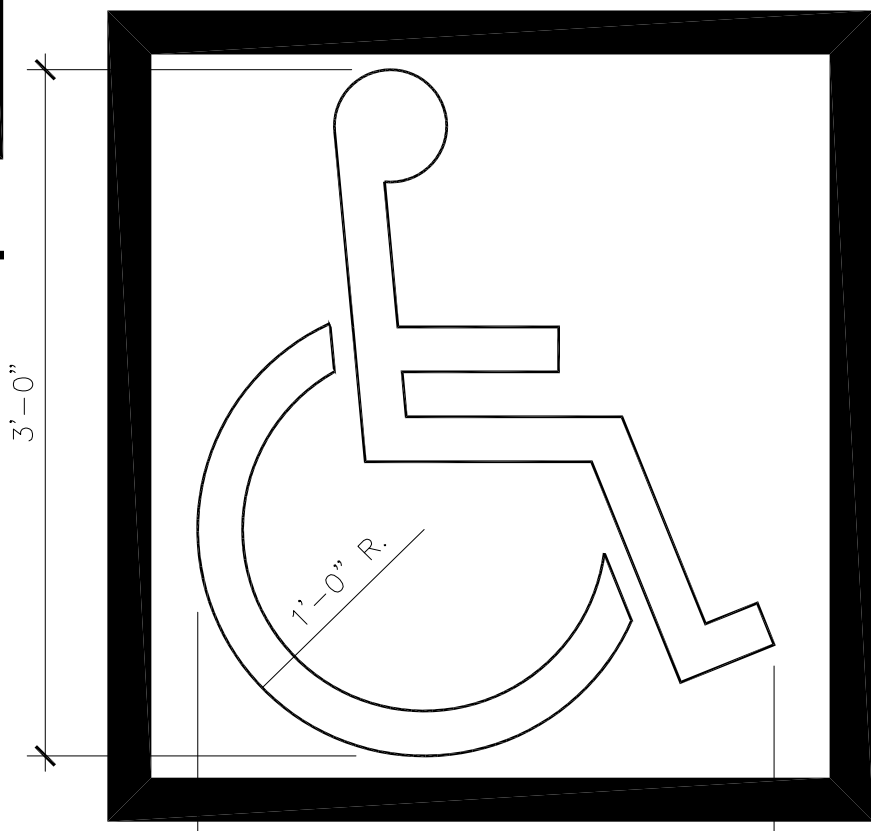
- MIN. 6" THICK CLASS "A" CONCRETE ON 4" A.B.C. 95% COMP. AS PER YAG & MAG 340 & 725
- SLAB TO BE REINFORCED W/ 6x6 - 8/8 W.W.F.
- SLAB TO BE POURED TO THE SAME ELEV. AS THE APPROACH.



DISPLAY CONDITIONS



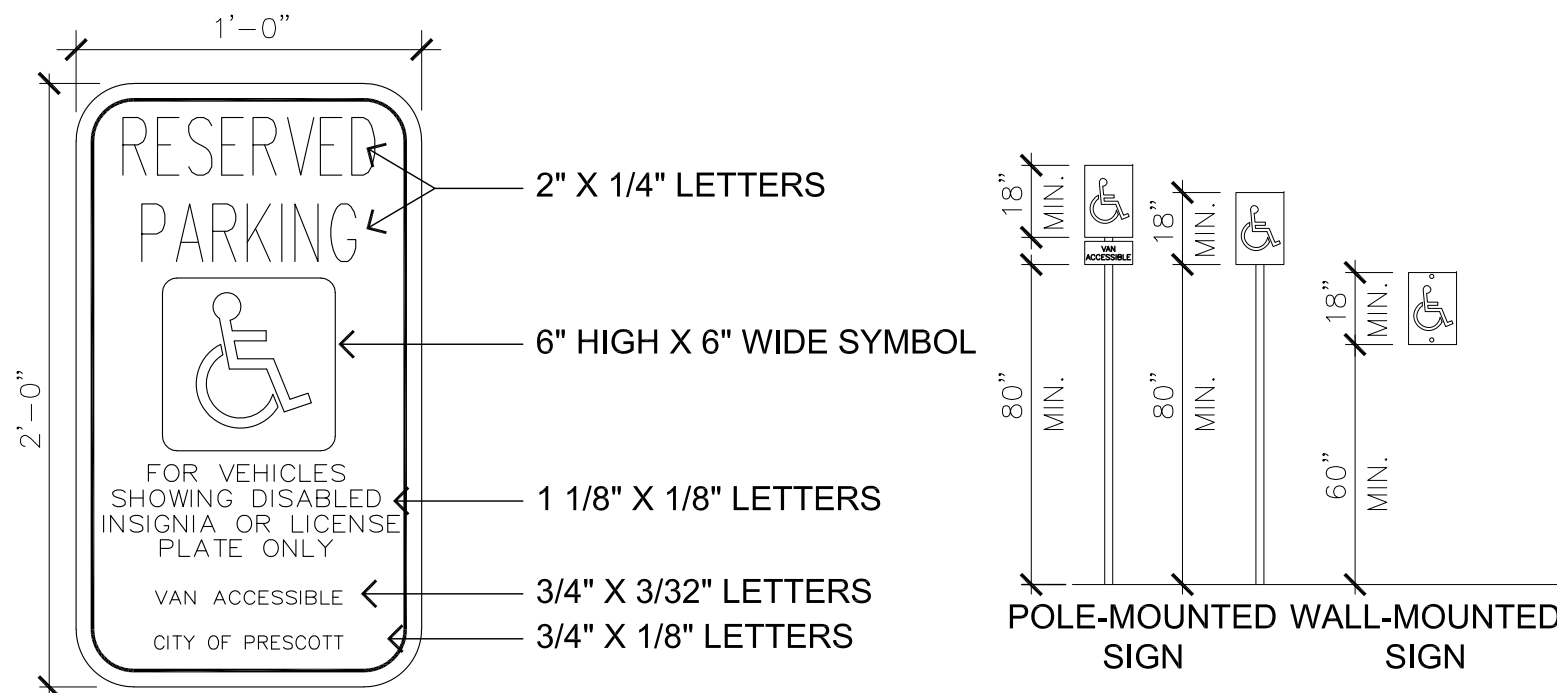
PROPORTIONS



SYMBOL © PARKING SPACE

ADA Symbol of Accessibility

Not to Scale



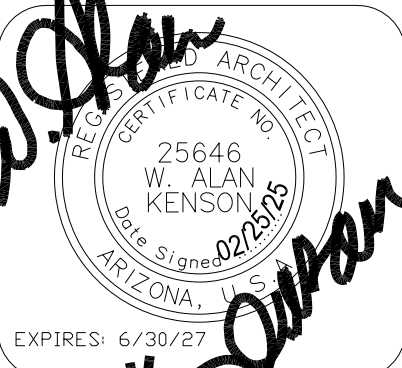
- THE SIGN PLATE SHALL BE A MINIMUM OF 12"x24" WITH A THICKNESS OF .080 ALUMINUM CONSTRUCTION.
- THE SIGN FACE SHALL HAVE A WHITE REFLECTIVE BACKGROUND WITH A BLUE LEGEND. (STANDARD 3M SCOTCHLITE SIGN FACE NUMBER R7-32 OR EQUIVALENT, WITH BLUE SCREEN PRINTED LETTER AS SHOWN ABOVE.)
- ALL ACCESSIBLE PARKING SPACES SHALL BE IDENTIFIED BY A SIGN ON A CITY APPROVED STATIONARY POST OR WALL LOCATION. THESE SIGNS SHALL NOT BE OBSCURED.
- ACCESSIBLE PARKING SPACES SHALL BE DESIGNATED AS RESERVED FOR PHYSICALLY DISABLED BY A SIGN SHOWING THE INTERNATIONAL WHEELCHAIR SYMBOL IN COLOR SCHEME ON CONTRASTING BACKGROUND.
- THE SIGN SHALL HAVE THE MINIMUM VERBIAGE OF "RESERVED PARKING" AND INTERNATIONAL WHEELCHAIR SYMBOL.

D1 Accessible Parking Sign

Scale: 1/4" = 1'-0"

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304

email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Site Details

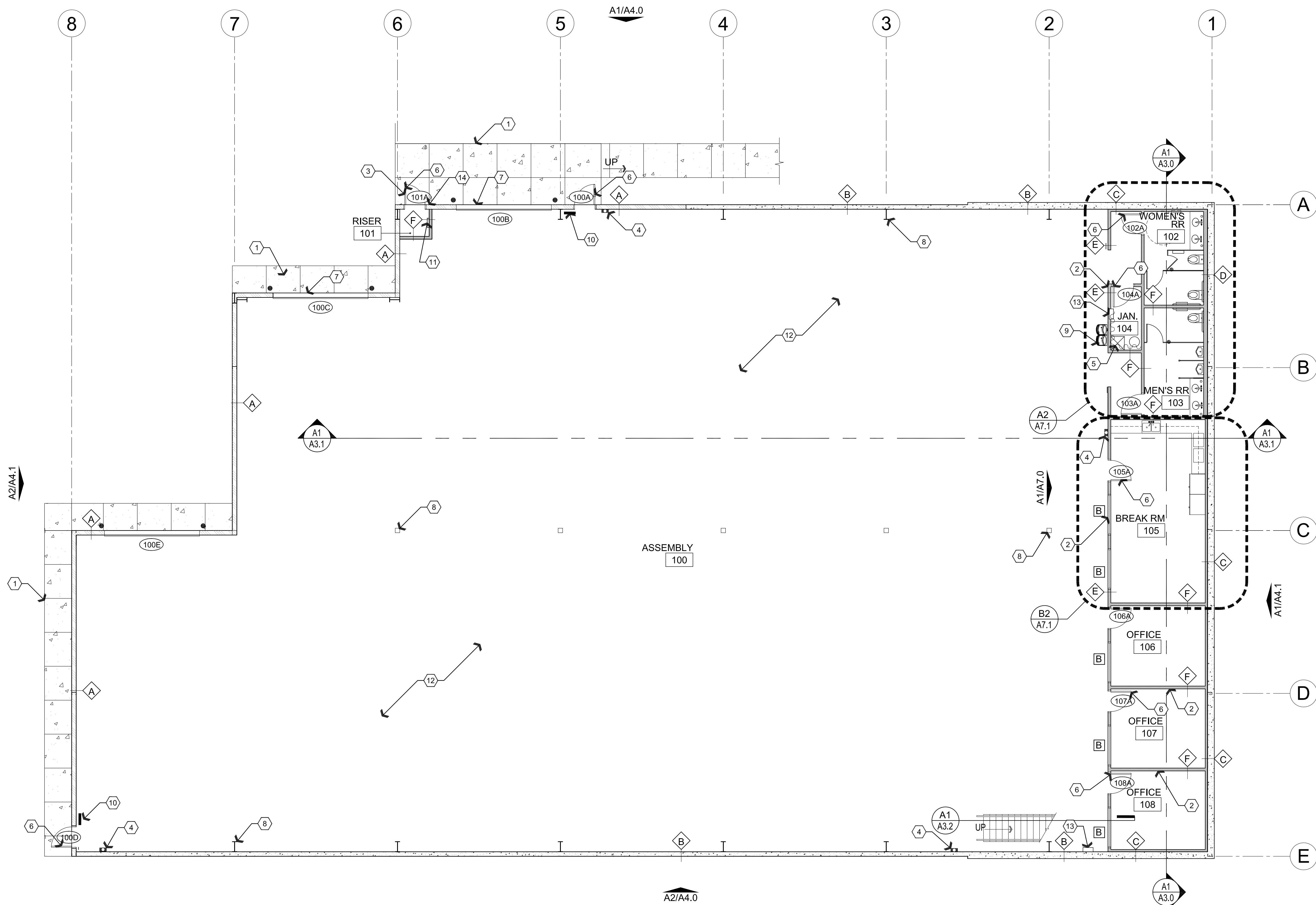
PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB NO. 803
SHEET

A1.1

Mar 13, 2025 - 10:59am



A1 First Floor Reference / Wall Types Plan

Descriptive Keynotes

1. PROVIDE 5" CONCRETE SIDEWALK W/#4s @ 2'-0" O.C. OVER 4" COMPACTED A.B.C., REFER TO SITE PLAN AND CIVIL PLANS.
2. PROVIDE INTERIOR WALL, REFER TO WALL TYPES LEGEND FOR TYPE OF CONSTRUCTION.
3. PROVIDE SIGNAGE STATING 'FIRE RISER ROOM'.
4. PROVIDE TYPE 2A10BC FIRE EXTINGUISHER IN SURFACE MOUNTED WALL CABINET. FIRE EXTINGUISHERS SHALL BE PROVIDED IN ACCORDANCE WITH THE INTERNATIONAL FIRE CODE (IFC) AND NFPA 10. REFER TO THE MATERIALS SCHEDULE. FE-1
5. PROVIDE MOP SINK, REFER TO PLUMBING PLANS.
6. PROVIDE DOOR, REFER TO DOOR SCHEDULE. (TYPICAL)
7. PROVIDE SECTIONAL ROLL UP DOOR, REFER TO DOOR SCHEDULE. (TYPICAL)
8. PROVIDE STEEL COLUMN, REFER TO STRUCTURAL PLANS. (TYPICAL)
9. ELECTRIC DRINKING FOUNTAIN, REFER TO PLUMBING PLANS.
10. PROVIDE A 6"x9" BLUE TACTILE, BRAILLE, 'EXIT' SIGN AS MANUFACTURED BY 'SIMPLY EXIT SIGNS (#SE-1980)' OR EQUAL COMPLYING WITH ICC/ANSI A117.1 SECTION 703.1 AND IBC 1013 & SECTION 1111, ADJACENT TO EACH DOOR TO AN EXIT PASSAGEWAY AND THE EXIT DISCHARGE.
11. PROVIDE FIRE ALARM CONTROL PANEL.
12. PROVIDE 5" CONCRETE FLOOR W/ #4s @ 4'-0" O.C. OVER COMPACTED A.B.C., REFER TO STRUCTURAL PLANS.
13. PROVIDE ELECTRICAL PANEL, REFER TO ELECTRICAL PLANS.
14. PROVIDE KNOX BOX FOR FIRE DEPARTMENT ACCESS.

Wall Types Legend

- A EXTERIOR METAL BUILDING WALL: PROVIDE EXTERIOR METAL BUILDING SIDING 'A' PANELS OVER 8" HORIZONTAL GIRTS BETWEEN STEEL COLUMNS. PROVIDE R-25 LINER INSULATION SYSTEM. PROVIDE 8'-0" HIGH METAL WALL LINER 'R' PANELS. REFER TO WALL SECTIONS, SHEET A3.2
- B EXTERIOR METAL BUILDING WALL: PROVIDE EXTERIOR METAL BUILDING 'A' SIDING PANELS OVER OVER 8" HORIZONTAL GIRTS BETWEEN STEEL COLUMNS ABOVE CONCRETE WALL. PROVIDE R-25 LINER INSULATION SYSTEM ABOVE CONCRETE WALL.
- C EXTERIOR METAL BUILDING WALL: PROVIDE EXTERIOR METAL BUILDING 'A' SIDING PANELS OVER OVER 8" HORIZONTAL GIRTS BETWEEN STEEL COLUMNS ABOVE CONCRETE WALL AND 5/8" GPDW ON EXPOSED INTERIOR SIDE OF VERTICAL 3-5/8", 25 GAUGE METAL STUDS AT 2'-0" O.C. UP TO CEILING WITH R-11 UNFACED INSULATION. PROVIDE R-25 LINER INSULATION SYSTEM ABOVE CONCRETE WALL. PROVIDE WATERPROOFING ON EXTERIOR SIDE OF CONCRETE WALL.
- D EXTERIOR METAL BUILDING WALL: PROVIDE EXTERIOR METAL BUILDING 'A' SIDING PANELS OVER OVER 8" HORIZONTAL GIRTS BETWEEN STEEL COLUMNS ABOVE CONCRETE WALL AND 5/8" GPDW ON EXPOSED INTERIOR SIDE OF VERTICAL 6", 25 GAUGE METAL STUDS AT 2'-0" O.C. UP TO CEILING WITH R-19 UNFACED INSULATION. PROVIDE R-25 LINER INSULATION SYSTEM ABOVE CONCRETE WALL. PROVIDE WATERPROOFING ON EXTERIOR SIDE OF CONCRETE WALL.
- E 4" STUD WALL: PROVIDE 4" 18 GA. STEEL STUDS AT 1'-4" O.C. WITH 5/8" GPDW EACH SIDE. PROVIDE R-11 UNFACED BATT INSULATION.
- F 3-5/8" STUD WALL: PROVIDE 3-5/8" 25 GA. STEEL STUDS AT 2'-0" O.C. WITH 5/8" GPDW EACH SIDE. PROVIDE R-11 UNFACED BATT INSULATION.
- ~~~~~ 4'-0" HIGH FRP

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.
P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com
ARCHITECTURE & PLANNING

DRAWING: First Floor Reference/ Wall Types Plan

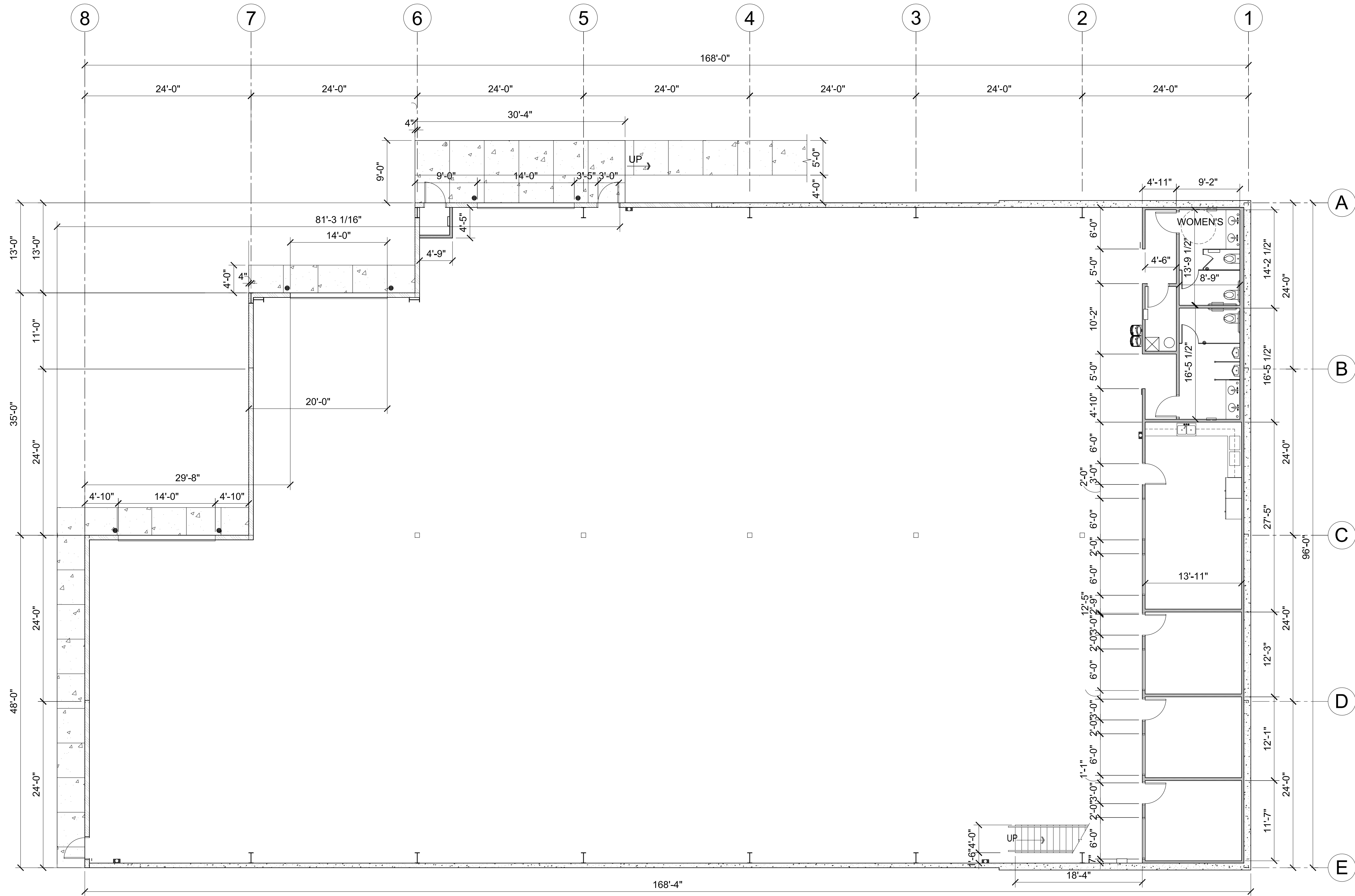
PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB. NO. 803
SHEET

A2.0

Feb 25, 2025 - 10:52am



A1 First Floor Dimension Plan

Scale: 1/8"=1'-0"



REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.
P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: First Floor Dimension Plan

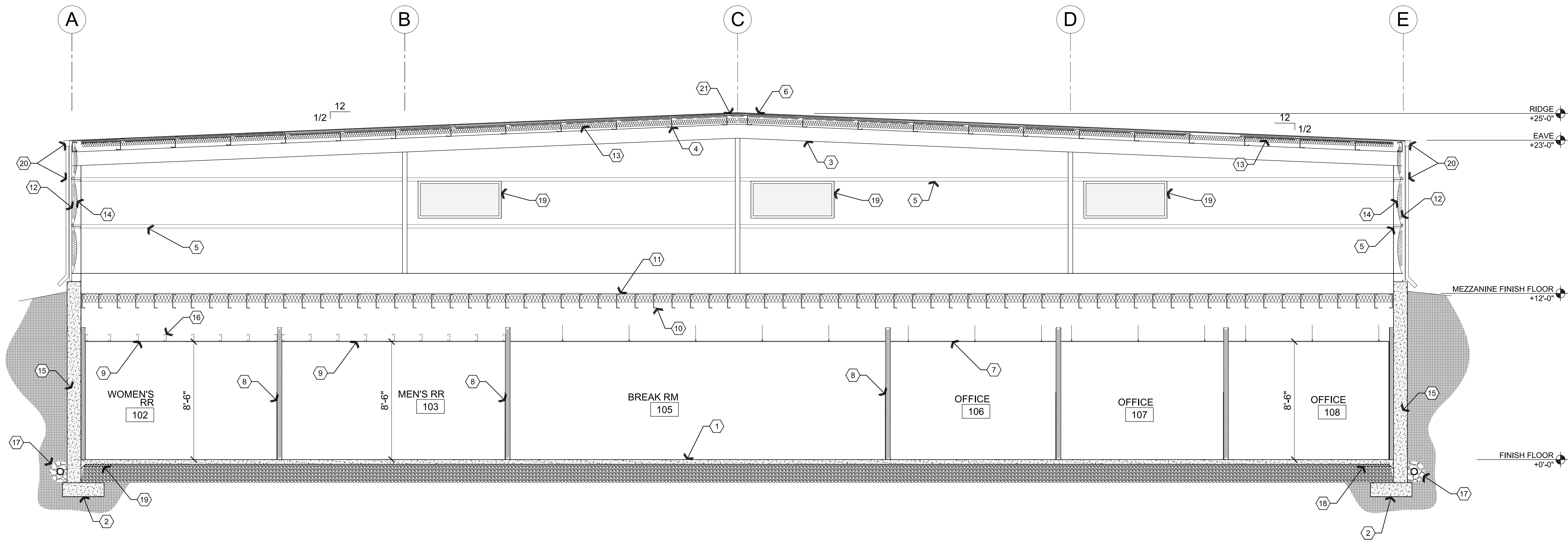
PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB. NO. 803
SHEET

A2.1

Feb 25, 2025 • 10:53am



A1 Building Section

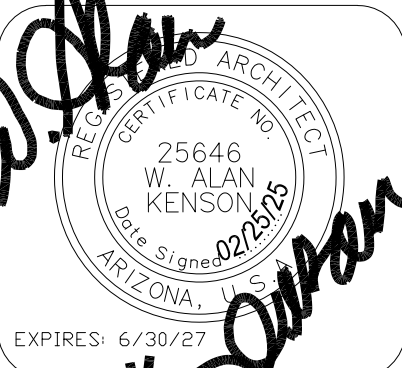
Scale: 1/4"=1'-0"

Descriptive Keynotes

1. PROVIDE CONCRETE SLAB OVER COMPACTED A.B.C., REFER TO STRUCTURAL PLANS.
2. PROVIDE CONCRETE FOOTING. REFER TO STRUCTURAL PLANS.
3. PROVIDE STEEL BEAM. REFER TO STRUCTURAL PLANS.
4. PROVIDE ROOF PURLIN, TYPICAL. REFER TO STRUCTURAL PLANS.
5. PROVIDE STEEL GIRT, TYPICAL. REFER TO STRUCTURAL PLANS.
6. PROVIDE STANDING SEAM SHEET METAL ROOF PANELS. REFER TO MATERIALS SCHEDULE. M-2
7. PROVIDE SUSPENDED CEILING. REFER TO REFLECTED CEILING PLAN AND MATERIALS SCHEDULE.
8. PROVIDE PARTITION WALL. REFER TO REFERENCE FLOOR PLAN AND WALL TYPES PLAN.
9. PROVIDE 5/8" GPDW CEILING, REFER TO REFLECTED CEILING PLAN.
10. PROVIDE FLOOR JOIST, REFER TO STRUCTURAL PLANS.
11. PROVIDE 3/4" OSB SHEATHING, OVER STEEL FLOOR JOISTS, REFER TO STRUCTURAL PLANS.
12. EXTERIOR WALL, REFER TO WALL TYPES PLAN FOR TYPE OF CONSTRUCTION.
13. R-38 (12") LONG TAB BANDED SYS FACED W/ VRR+, 2@12" DOUBLE SEAL TAB(S).
14. PROVIDE R-30 (9") PROLINER™ SYSTEM (WHITE).
15. PROVIDE CONCRETE RETAINING WALL WITH WATERPROOFING, REFER TO WALL TYPE PLAN AND STRUCTURAL PLANS.
16. PROVIDE 6" 20 GAUGE METAL JOISTS @ 2'-0" O.C., REFER TO CEILING FRAMING PLAN.
17. PROVIDE FRENCH DRAIN SYSTEM.
18. PROVIDE 2' OF 2" SLAB INSULATION.
19. PROVIDE EXTERIOR WINDOW, REFER TO WINDOW TYPES AND DIMENSION FLOOR PLAN.
20. PROVIDE METAL GUTTER AND DOWNSPOUT, REFER TO MATERIALS SCHEDULE. M-3 M-4
21. PROVIDE METAL RIDGE CAP, REFER TO MATERIALS SCHEDULE. M-6

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Building Section

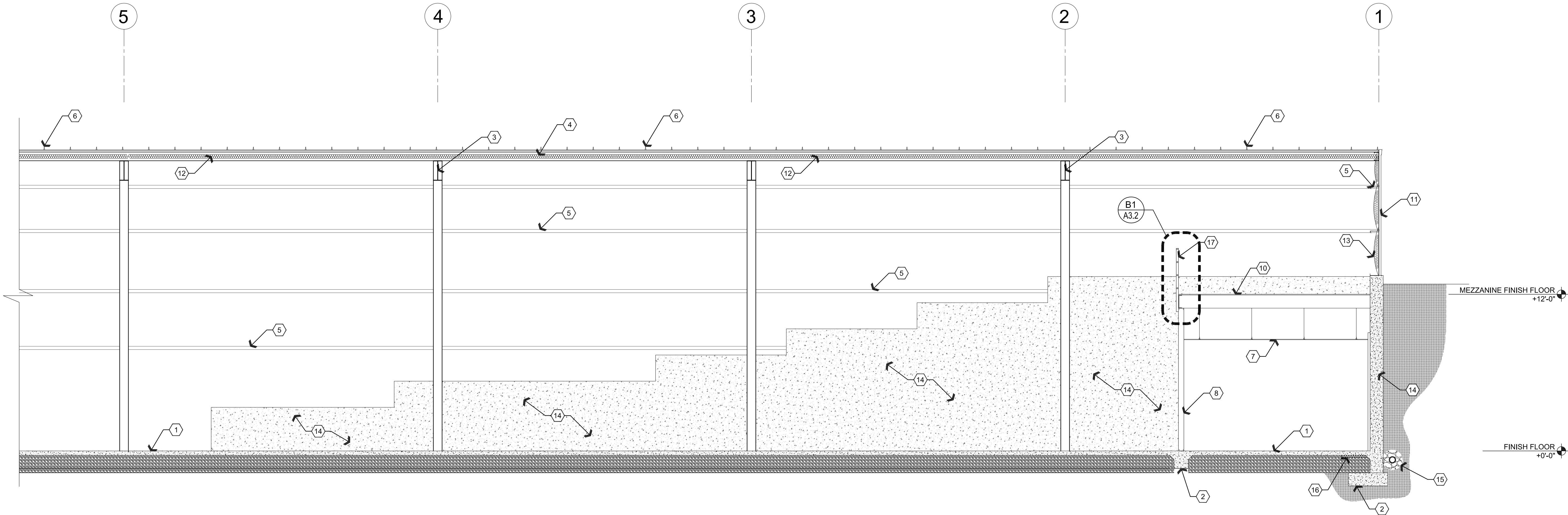
PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB. NO. 803
SHEET

A3.0

Feb 25, 2025 - 11:00am

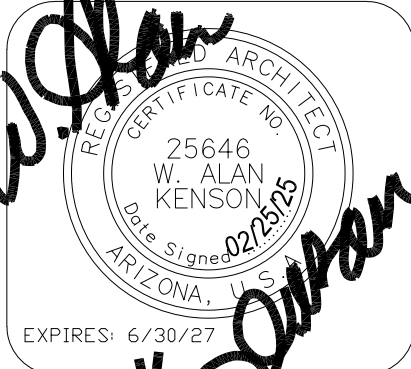


Descriptive Keynotes

1. PROVIDE CONCRETE SLAB OVER COMPACTED A.B.C., REFER TO STRUCTURAL PLANS.
2. PROVIDE CONCRETE FOOTING. REFER TO STRUCTURAL PLANS.
3. PROVIDE STEEL BEAM. REFER TO STRUCTURAL PLANS.
4. PROVIDE ROOF PURLIN, TYPICAL. REFER TO STRUCTURAL PLANS.
5. PROVIDE STEEL GIRT, TYPICAL. REFER TO STRUCTURAL PLANS.
6. PROVIDE STANDING SEAM SHEET METAL ROOF PANELS. REFER TO MATERIALS SCHEDULE. M-2
7. PROVIDE SUSPENDED CEILING. REFER TO REFLECTED CEILING PLAN AND MATERIALS SCHEDULE. ACT-1
8. PROVIDE PARTITION WALL. REFER TO REFERENCE FLOOR PLAN AND WALL TYPES PLAN.
9. PROVIDE FLOOR JOIST, REFER TO STRUCTURAL PLANS.
10. PROVIDE 3/4" OSB SHEATHING, REFER TO STRUCTURAL PLANS.
11. PROVIDE EXTERIOR WALL, REFER TO WALL TYPES PLAN FOR TYPE OF CONSTRUCTION.
12. PROVIDE R-38 (12") LONG TAB BANDED SYS FACED W/ VRR+, 2@12" DOUBLE SEAL TAB(S).
13. PROVIDE R-30 (9") PROLINER™ SYSTEM (WHITE).
14. PROVIDE CONCRETE RETAINING WALL WITH WATERPROOFING, REFER TO WALL TYPE PLAN AND STRUCTURAL PLANS.
15. PROVIDE FRENCH DRAIN SYSTEM.
16. PROVIDE 2' OF 2" SLAB INSULATION.
17. PROVIDE GUARD RAIL, REFER TO DETAIL B1/A3.2.

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Building Section

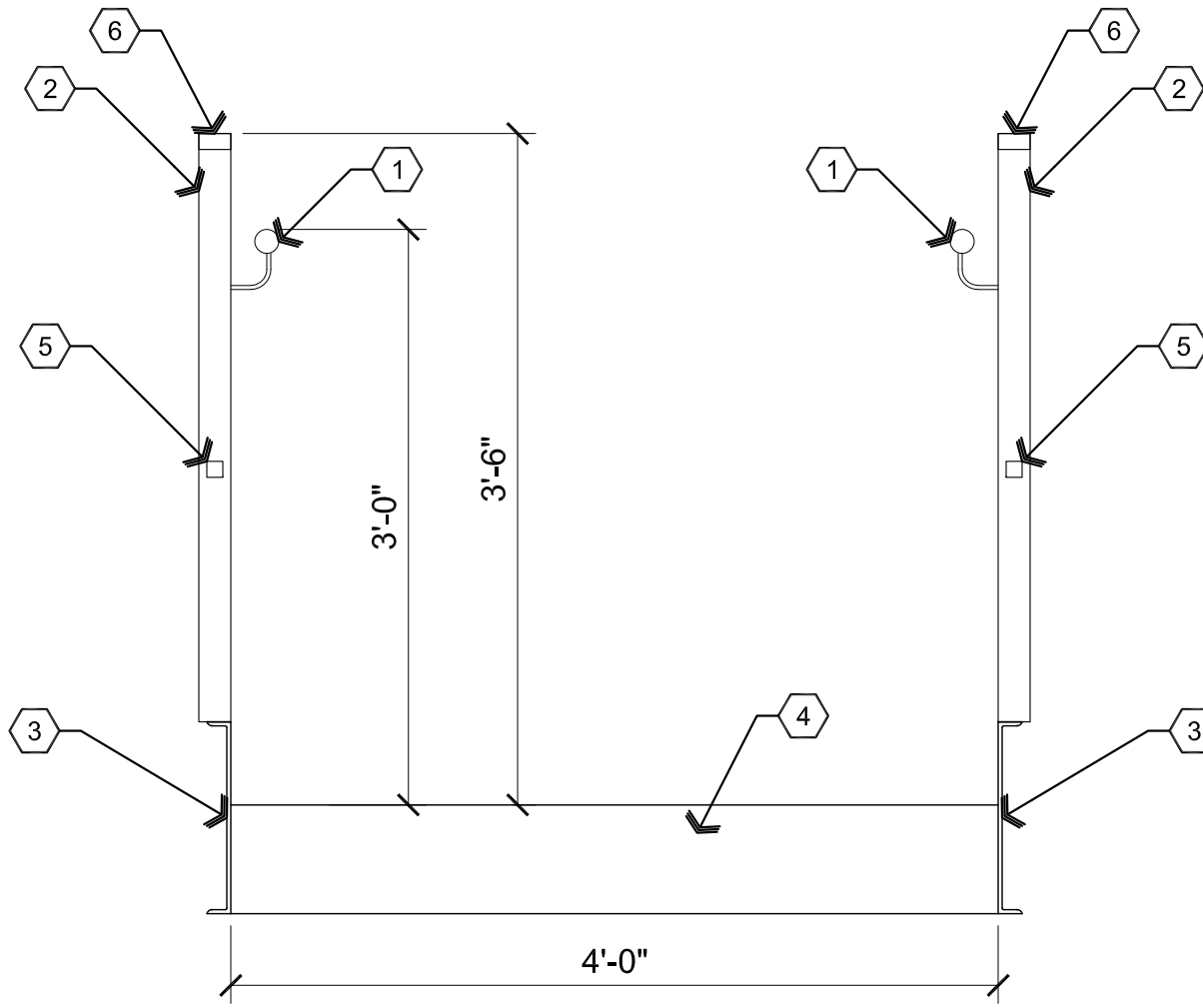
PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB. NO. 803
SHEET

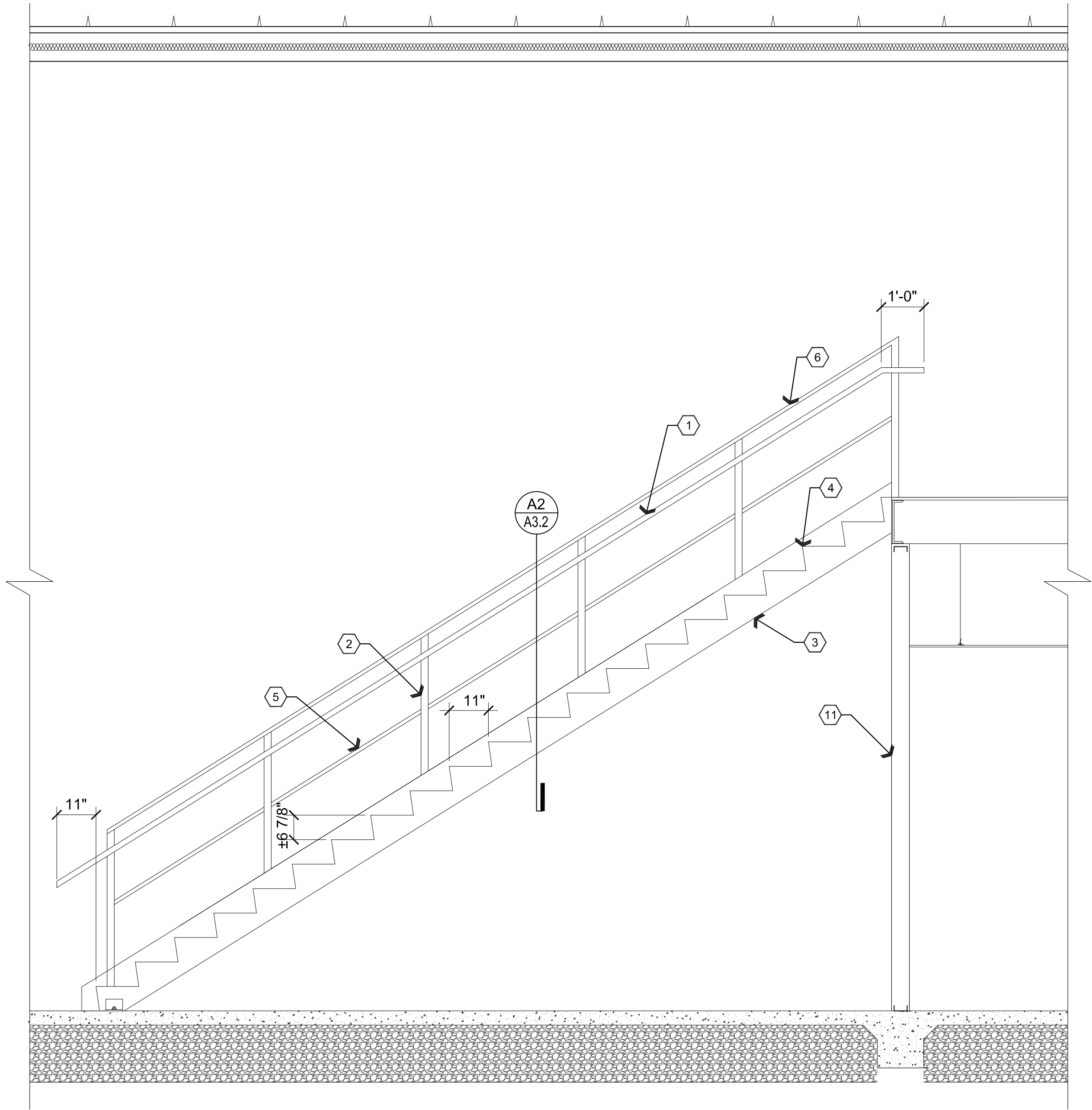
A3.1

Feb 25, 2025 - 11:01am



A2 Stair Section

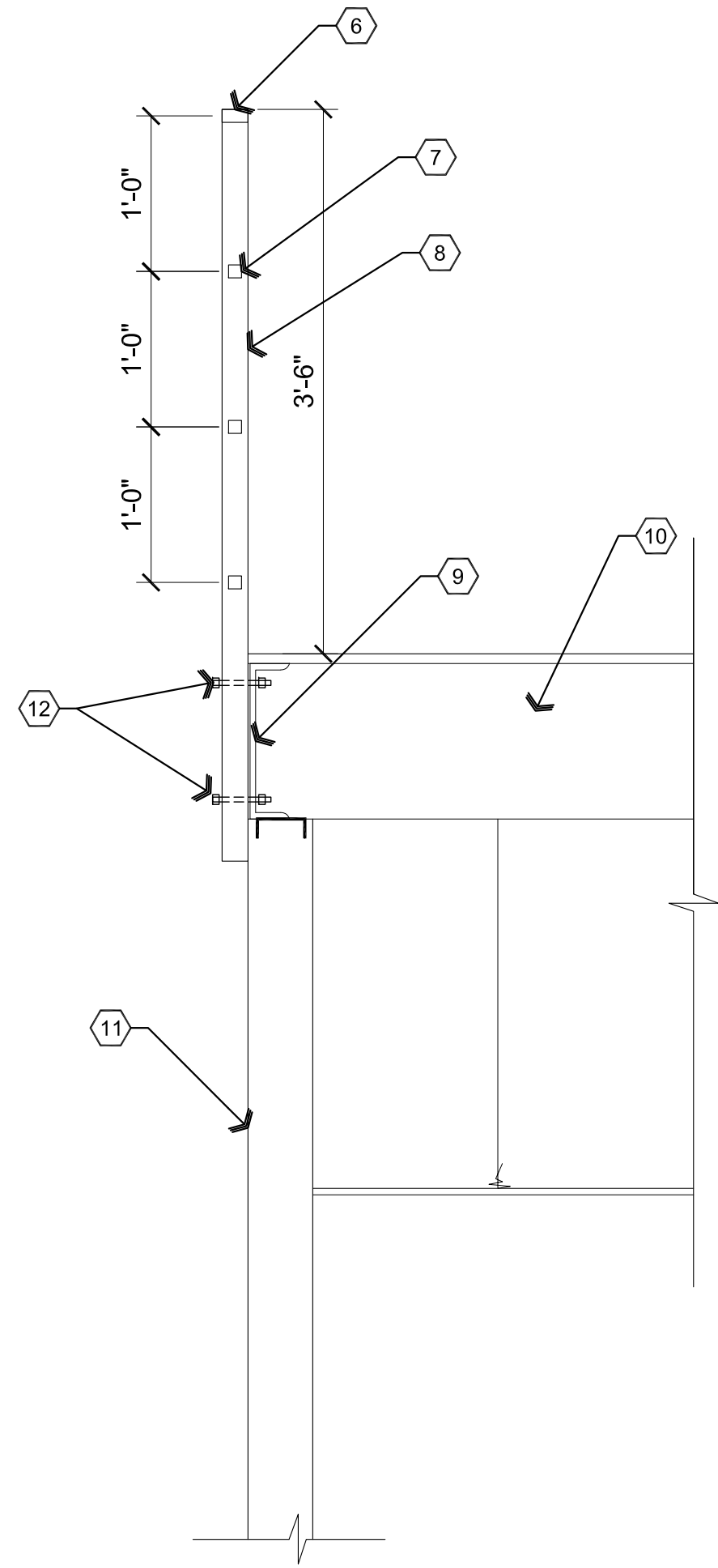
Scale: 1"=1'-0"



A1 Stair Section

Scale: 1/2"=1'-0"

- STAIRWAY NOTES:
- RISER HEIGHT SHALL BE 7" MAX. AND 4" MIN.
 - TREAD DEPTH SHALL BE 11" MIN.
 - STAIR TREADS AND RISERS SHALL BE UNIFORM IN SIZE AND SHAPE. THE TOLERANCE BETWEEN THE LARGEST AND SMALLEST RISER HEIGHT OR BETWEEN THE LARGEST AND SMALLEST TREAD DEPTH SHALL NOT EXCEED 3/8 INCH IN ANY FLIGHT OF STAIRS.
 - HANDRAIL HEIGHT MEASURED ABOVE STAIR TREAD NOSINGS, SHALL BE UNIFORM, NOT LESS THAN 34 INCHES AND NOT MORE THAN 38 INCHES.
 - HANDRAILS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF NOT LESS THAN 1 1/4" AND NOT GREATER THAN 2".
 - HANDRAILS SHALL RETURN TO A WALL, GUARD OR THE WALKING SURFACE OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT FLIGHT OF STAIRS OR RAMP RUN. WHERE HANDRAILS ARE NOT CONTINUOUS BETWEEN FLIGHTS, THE HANDRAILS SHALL EXTEND HORIZONTALLY NOT LESS THAN 12" BEYOND THE TOP RISER AND CONTINUE TO SLOPE FOR THE DEPTH OF ONE TREAD BEYOND THE BOTTOM RISER.



B1 Guard Rail Section

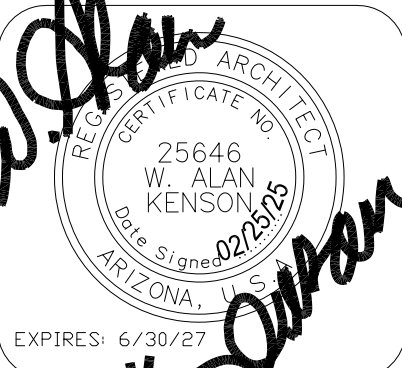
Scale: 1"=1'-0"

Descriptive Keynotes

1. PROVIDE 1-1/2" SCHEDULE 40 PAINTED PIPE STEEL HANDRAIL @ 36" ABOVE STAIR NOSING. ATTACH TO GUARDRAIL / STAIR STRINGER.
2. PROVIDE 2"x2"x3/16" PAINTED PIPE STEEL TUBE GUARDRAIL. TOP OF GUARDRAIL TO BE 42" ABOVE STAIR NOSING. GUARDS SHALL NOT HAVE OPENING WHICH ALLOW PASSAGE OF A SPHERE 21 INCHES IN DIAMETER.
3. PROVIDE STEEL STRINGER - REFER TO STRUCTURAL PLANS.
4. PROVIDE PRE-BENT 12 GAUGE DIAMOND PLATE, IBC COMPLIANT, TREAD / RISERS - REFER TO STRUCTURAL PLANS.
5. PROVIDE 1"x1"x1/8" PAINTED STEEL TUBE INTERMEDIATE RAIL.
6. PROVIDE 2"x1"x3/16" PAINTED STEEL TUBE TOP RAIL.
7. 1"x1"x1/8" PAINTED TUBE RAILS NOT TO EXCEED 12" O.C.
8. PROVIDE 2"x2"x3/16" PAINTED STEEL TUBE POSTS @ 8'-0" O.C.
9. PROVIDE C CHANNEL, REFER TO STRUCTURAL PLANS.
10. PROVIDE FLOOR JOIST, REFER TO STRUCTURAL PLANS.
11. PROVIDE WALL, REFER TO WALL TYPES PLAN.
12. PROVIDE (2) 3/8" MACHINE BOLTS.

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



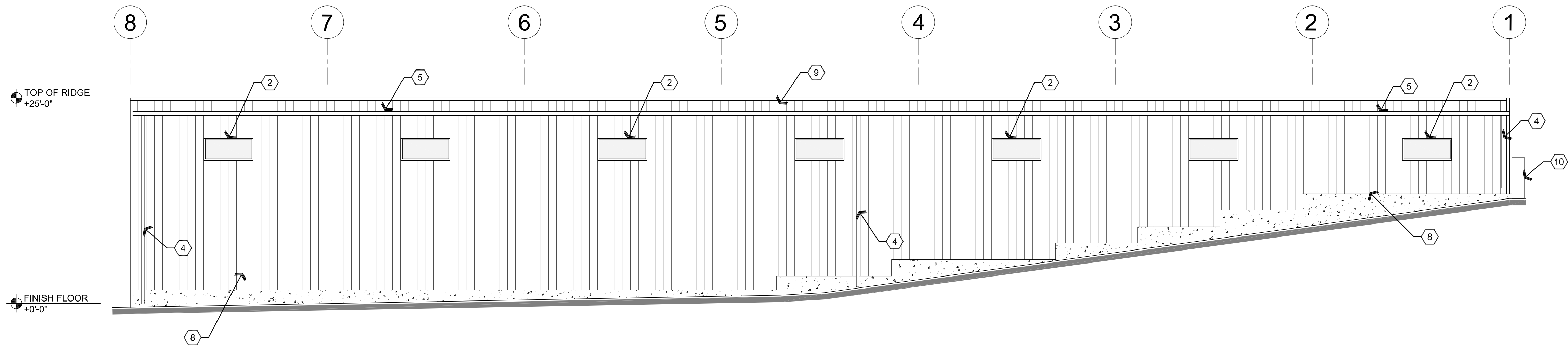
W. Alan Kenson & Associates, P.C.
P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com
ARCHITECTURE & PLANNING

DRAWING: Stair Sections / Details
PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ
APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB. NO. 803
SHEET

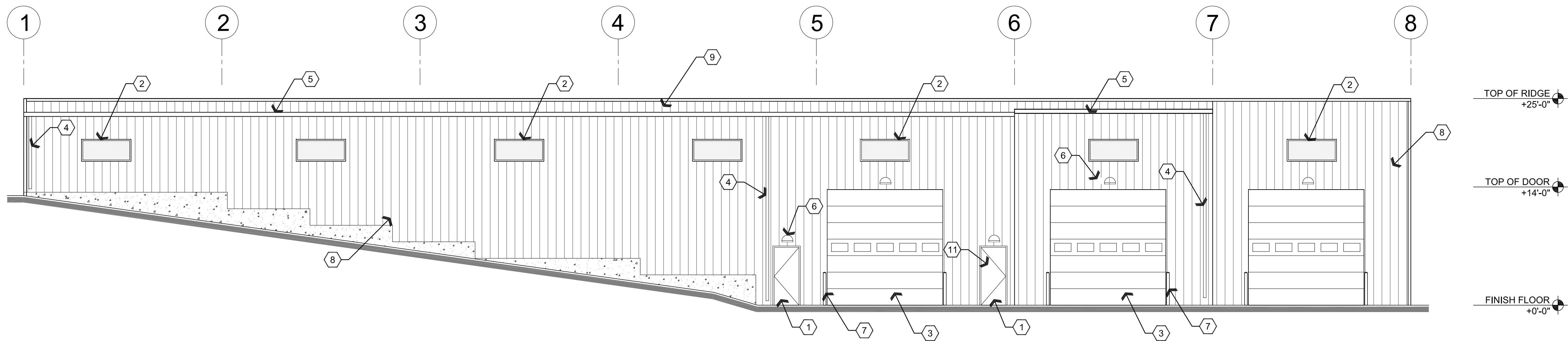
A3.2

Feb 25, 2025 - 11:01am



A2 South Elevation

Scale: 1/8"=1'-0"



A1 North Elevation

Scale: 1/8"=1'-0"

Descriptive Keynotes

1. PROVIDE DOOR, REFER TO REFERENCE FLOOR PLAN AND DOOR SCHEDULE, TYPICAL.
2. PROVIDE WINDOW, REFER TO REFERENCE FLOOR PLAN AND WINDOW TYPES, TYPICAL.
3. PROVIDE SECTIONAL DOOR, REFER TO REFERENCE FLOOR PLAN AND DOOR SCHEDULE.
4. PROVIDE SHEET METAL DOWNSPOUT, REFER TO MATERIALS SCHEDULE. M-3
5. PROVIDE SHEET METAL GUTTER, REFER TO MATERIALS SCHEDULE. M-4
6. PROVIDE LIGHT FIXTURE, REFER TO ELECTRICAL PLANS, TYPICAL.
7. PROVIDE 4" STEEL CONCRETE FILLED BOLLARDS, 4'-0" ABOVE CONCRETE WITH 2'-0" EMBEDDED INTO CONCRETE FOOTING BELOW, TYPICAL.
8. PROVIDE METAL WALL PANEL. REFER TO WALL TYPES PLAN AND MATERIALS SCHEDULE. M-1
9. PROVIDE METAL ROOF PANELS, REFER TO MATERIALS SCHEDULE. M-2
10. PROVIDE ELECTRICAL SERVICE ENTRANCE SECTION, REFER TO ELECTRICAL PLANS.
11. PROVIDE SIGNAGE AT EXTERIOR OF FIRE ALARM ROOM IN 1" LETTERS ON A CONTRASTING BACKGROUND.

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Exterior Elevations

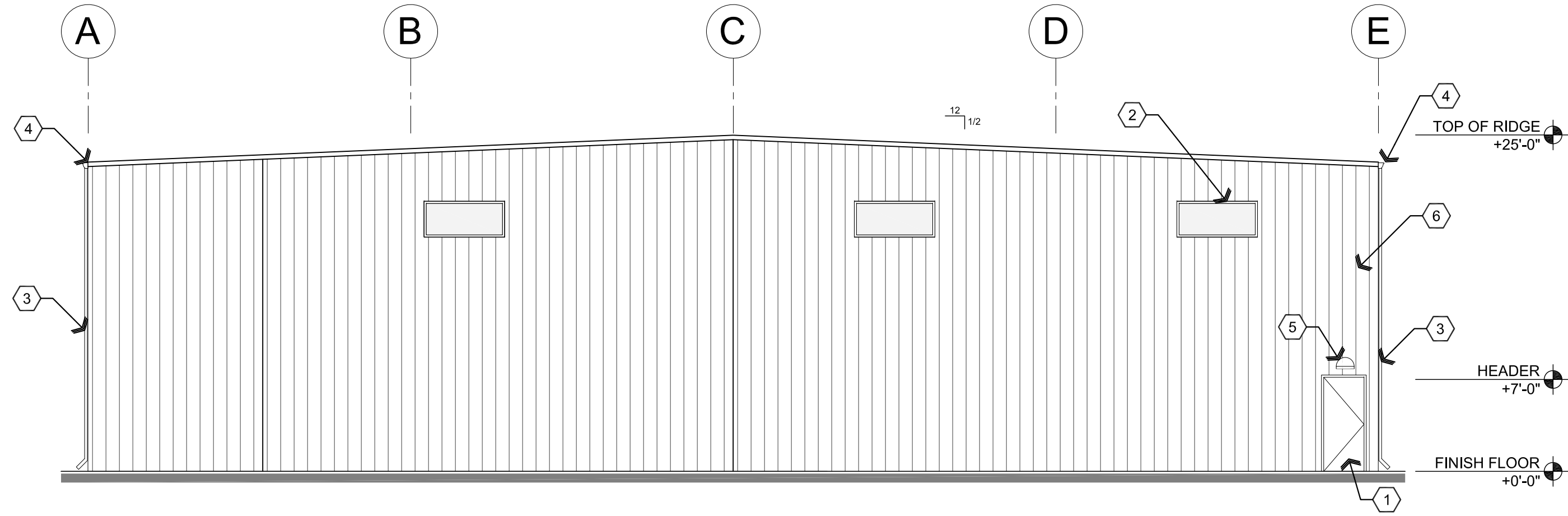
PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB. NO. 803
SHEET

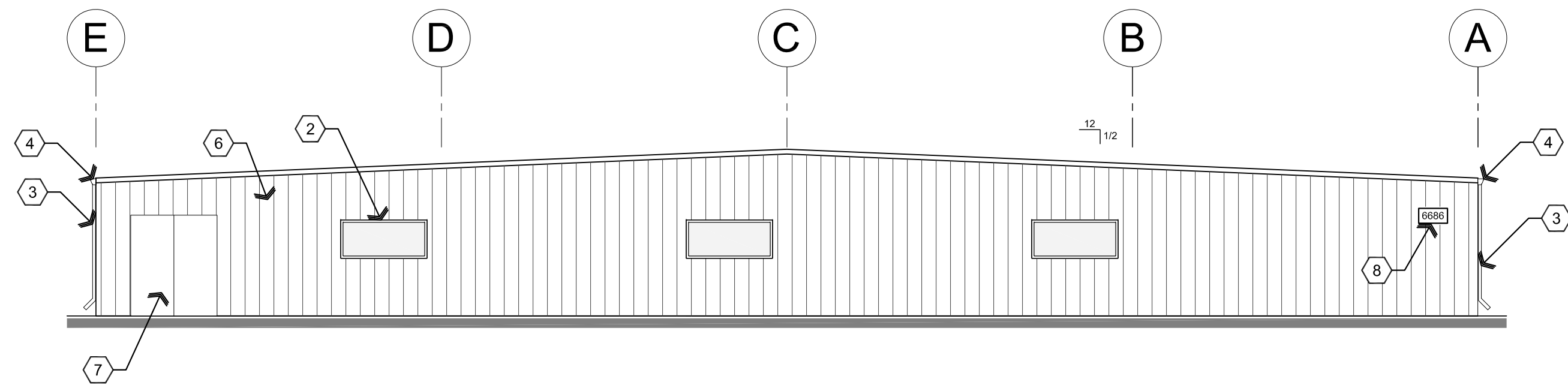
A4.0

Feb 25, 2025 - 11:01am



A2 West Elevation

Scale: 1/8"=1'-0"



A1 East Elevation

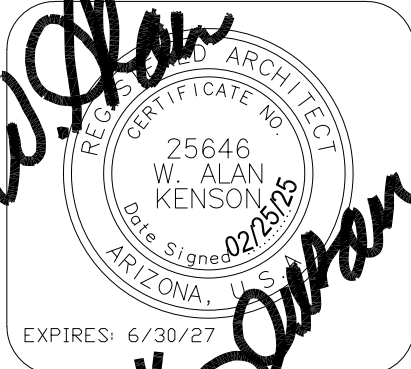
Scale: 1/8"=1'-0"

Descriptive Keynotes

1. PROVIDE DOOR, REFER TO REFERENCE FLOOR PLAN AND DOOR SCHEDULE, TYPICAL.
2. PROVIDE WINDOW, REFER TO REFERENCE FLOOR PLAN AND WINDOW TYPES, TYPICAL.
3. PROVIDE SHEET METAL DOWNSPOUT, REFER TO MATERIALS SCHEDULE. **M-3**
4. PROVIDE SHEET METAL GUTTER, REFER TO MATERIALS SCHEDULE. **M-4**
5. PROVIDE LIGHT FIXTURE, REFER TO ELECTRICAL PLANS, TYPICAL.
6. PROVIDE METAL WALL PANEL. REFER TO WALL TYPES PLAN AND MATERIALS SCHEDULE. **M-1**
7. PROVIDE ELECTRICAL SERVICE ENTRANCE SECTION, REFER TO ELECTRICAL PLANS.
8. PROVIDE 6" HIGH ADDRESS NUMBERS ON A CONTRASTING BACKGROUND.

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Exterior Elevations

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB. NO. 803
SHEET

A4.1

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.

Professional Engineer Seal for W. Alan Kenson, State of Arizona, License No. 25646, dated 02/25/25. The seal is circular with the text "REGISTERED ARCHITECT" around the top and "ARIZONA, U.S.A." around the bottom. The center contains the license number "25646", the name "W. ALAN KENSON", and the date "Date signed 02/25/25". The seal is stamped over a document with handwritten text "Don" and "Kenson".

W. Alan Kenison & Associates
P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenison-associates.com

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB NO. 803

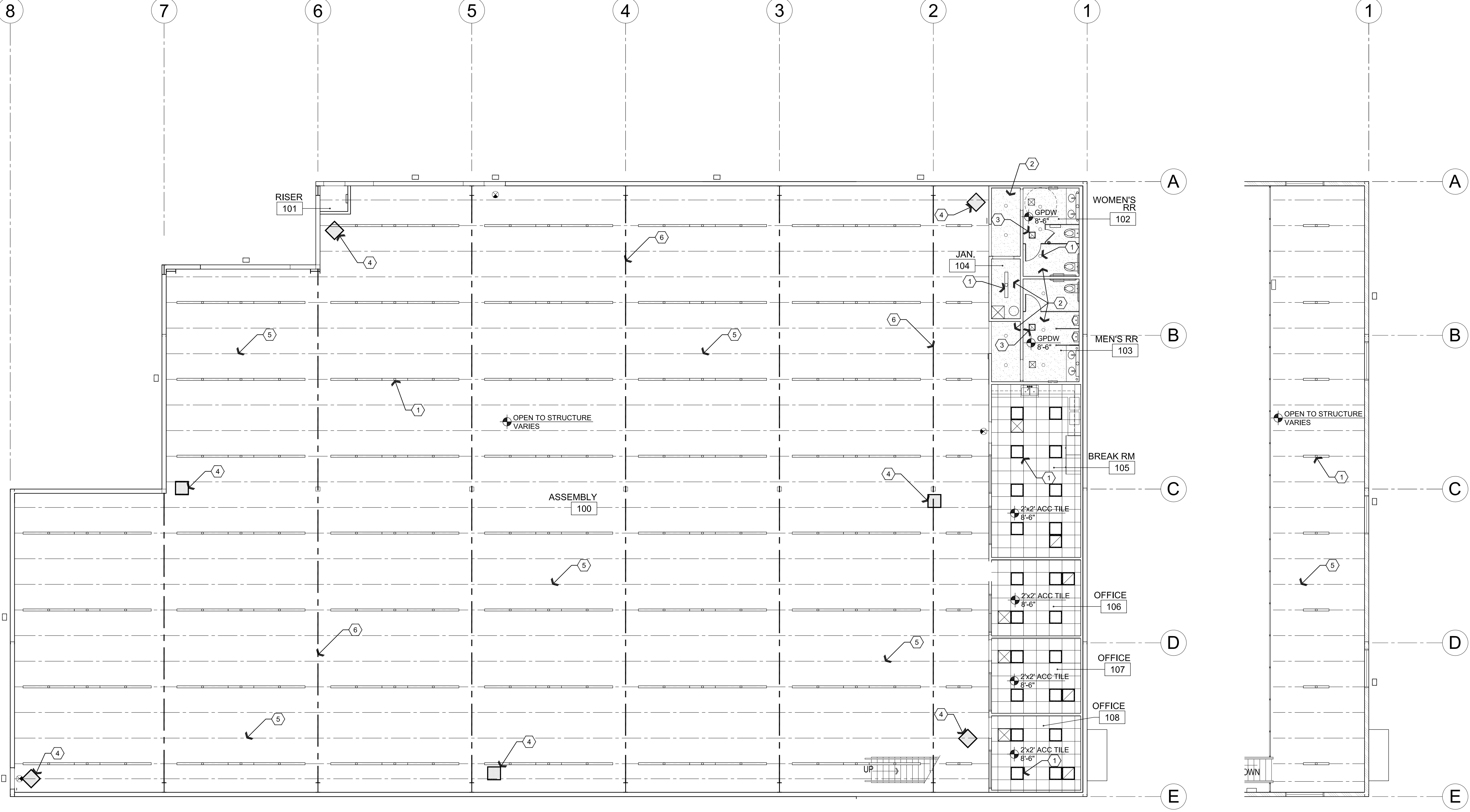
SHEET

A5.0

Descriptive Keynotes



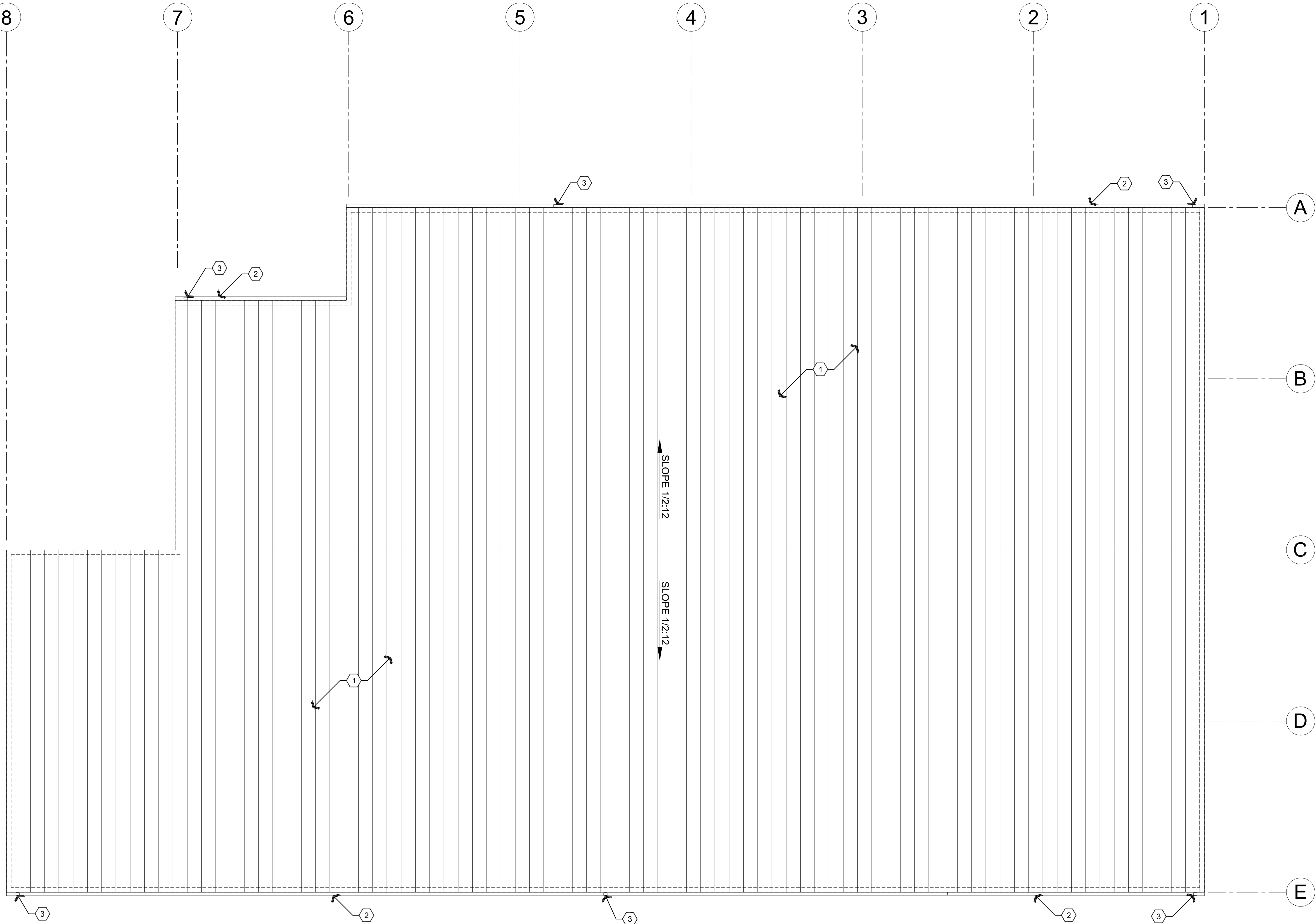
1. LIGHT FIXTURE(S) SHOWN FOR QUANTITY AND LOCATION ONLY. REFER TO ELECTRICAL PLANS.
2. PROVIDE 5/8" GPDW CEILING ATTACHED TO 6", 20 GAUGE, METAL JOISTS @ 2'-0" O.C.
3. EXHAUST FAN, REFER TO MECHANICAL PLANS, TYPICAL.
4. PROVIDE UNIT HEATER, REFER TO MECHANICAL PLANS.
5. ROOF PURLIN, TYPICAL, REFER TO STRUCTURAL PLANS.
6. BEAM, TYPICAL, REFER TO STRUCTURAL PLANS.



Scale: 1/8"=1'-0"

Scale: 1/8"=1'-0"  Plan
North

Feb 25, 2025 - 11:12am



AL Roof Plan

Scale: 1/8"=1'-0"



Descriptive Keynotes

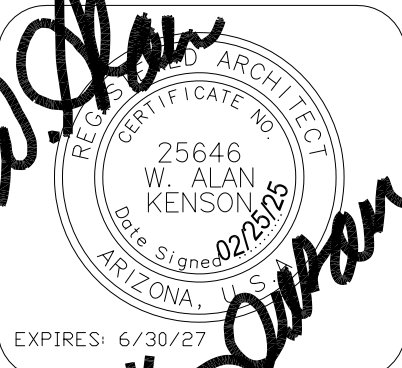
1. PROVIDE 24 GAUGE ULTRA-DEK STANDING SEAM SHEET METAL ROOF PANELS, REFER TO MATERIALS SCHEDULE. M-2
2. PROVIDE SHEET METAL GUTTER, REFER TO MATERIALS SCHEDULE. M-4
3. PROVIDE DOWNSPOUT, TYPICAL OF 6, REFER TO MATERIALS SCHEDULE. M-3

Roof Drain Leader Sizes:

ROOF AREA : 14,680
4" RAINFALL = .0416 GPM
.0416 x 14,680 = 610 GPM
610 / 192 (3-1/2"x4")= 3
3-1/2" x 4" DOWNSPOUTS = 3 LEADERS REQUIRED
6 LEADERS PROVIDED
3" x 5" GUTTER REQUIRED WITH 1/2" SLOPE (225 GPM)
*PER 2018 IPC SECTION 1106 (TABLE 1106.3 &1106.6)

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

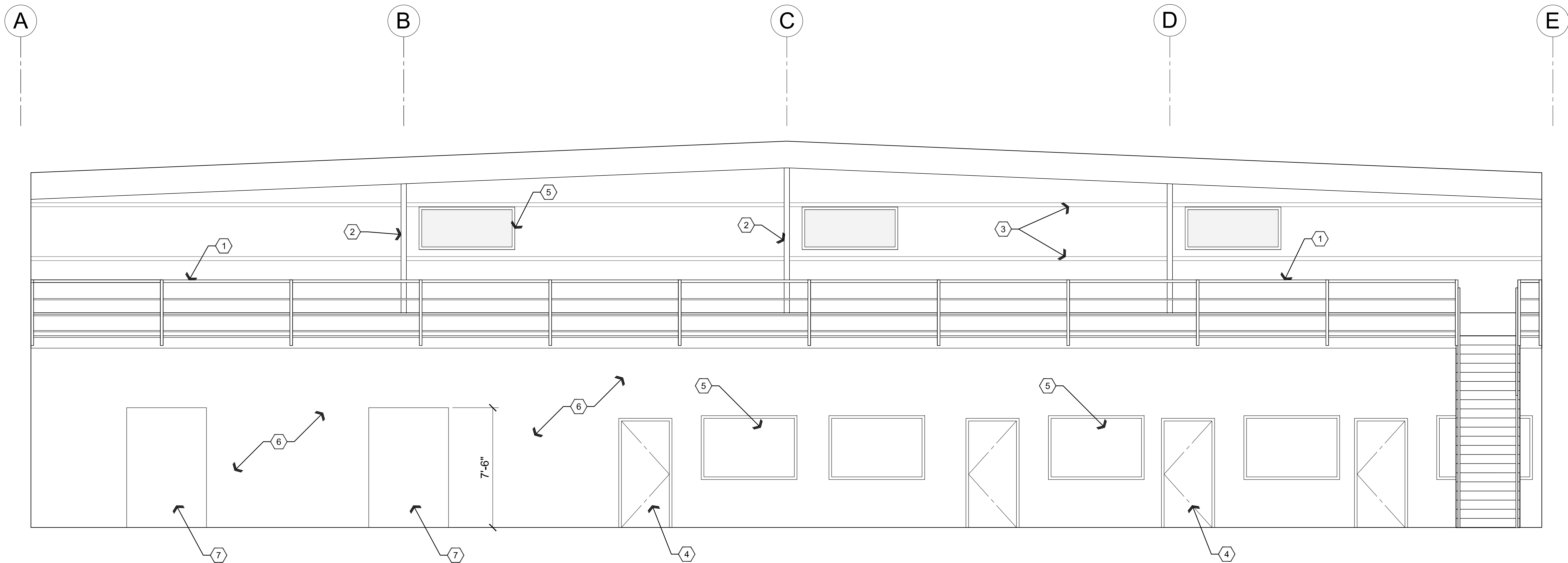
European Techniques 7
6686 Inter Cal Way
Prescott, AZ
103-50-019

DRAWING: Roof Plan
PROJECT:
APN:

DRAWN BY
L.O.
CHECKED BY
W.A.K.
DATE
February 25th, 2025
JOB. NO.
803
SHEET

A6.0

Feb 25, 2025 - 11:13am



Descriptive Keynotes

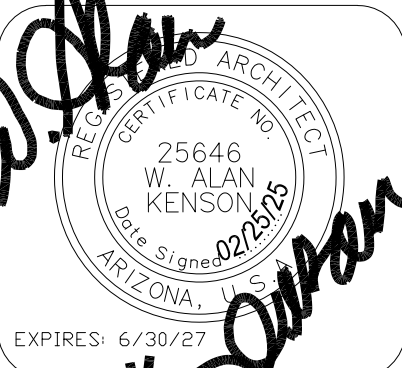
1. PROVIDE 2"x1"x3/16" STEEL TUBE GUARDRAIL PLACED AT 3'-6" ABOVE UPPER LEVEL FLOOR WITH INTERMEDIATE 1"x1"x1/8" STEEL TUBE RAILS NOT TO EXCEED 12" O.C. PROVIDE 2"x2"x3/16" STEEL POSTS SPACED AT 8'-0" O.C.
2. PROVIDE STEEL COLUMN. REFER TO STRUCTURAL PLANS.
3. PROVIDE STEEL GIRT, TYPICAL. REFER TO STRUCTURAL PLANS.
4. PROVIDE DOOR, REFER TO DOOR SCHEDULE AND REFERENCE FLOOR PLAN.
5. PROVIDE WINDOW, REFER TO WINDOW TYPES AND REFERENCE FLOOR PLAN.
6. PROVIDE PAINTED GPDW.
7. OPENING INTO CORRIDOR.

A1 Interior Elevation

Scale: 1/4"=1'-0"

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Interior Elevations

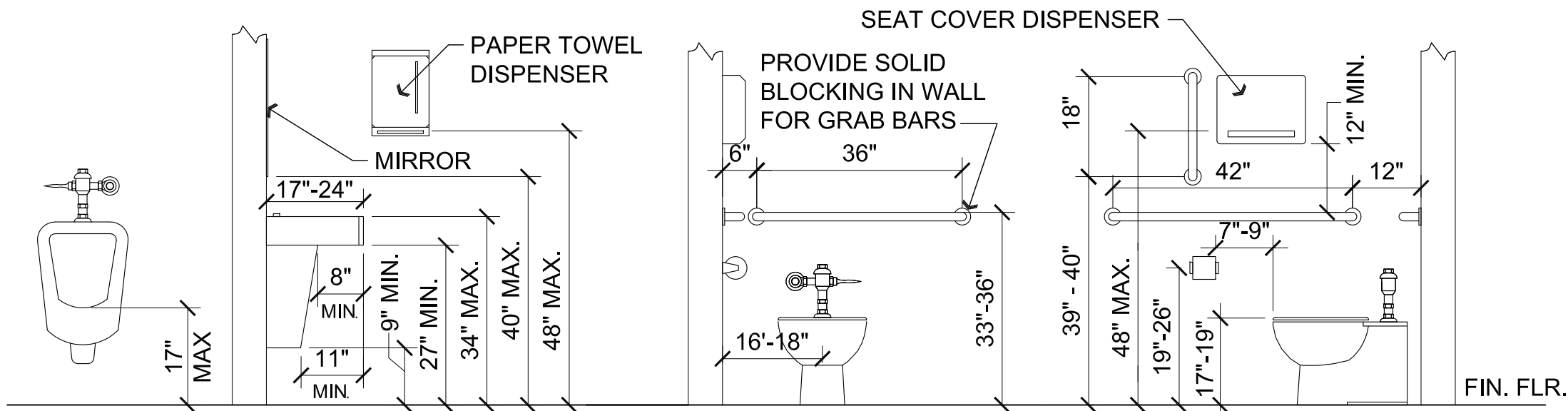
PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB. NO. 803
SHEET

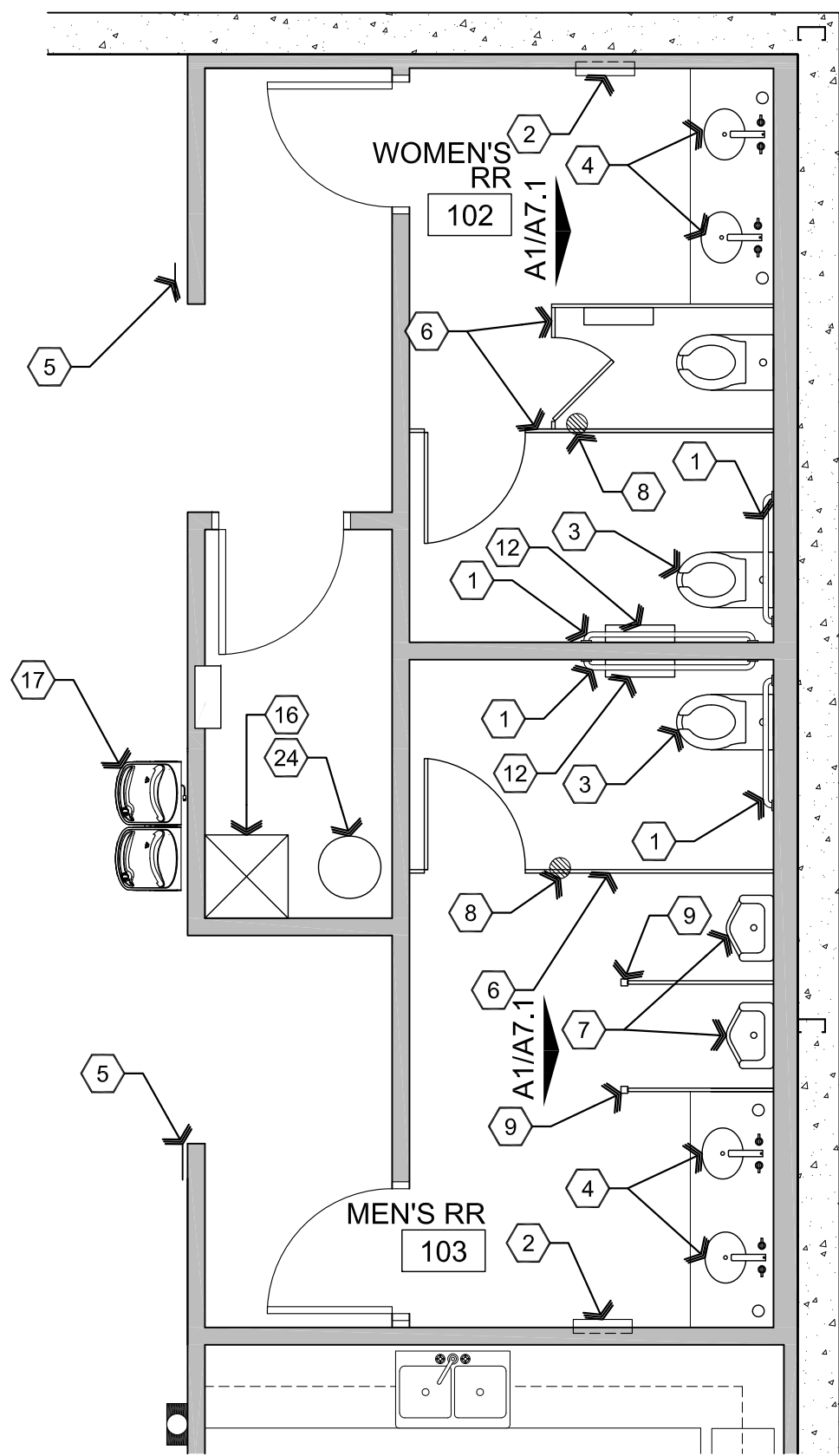
A7.0

Feb 25, 2025 • 12:14pm



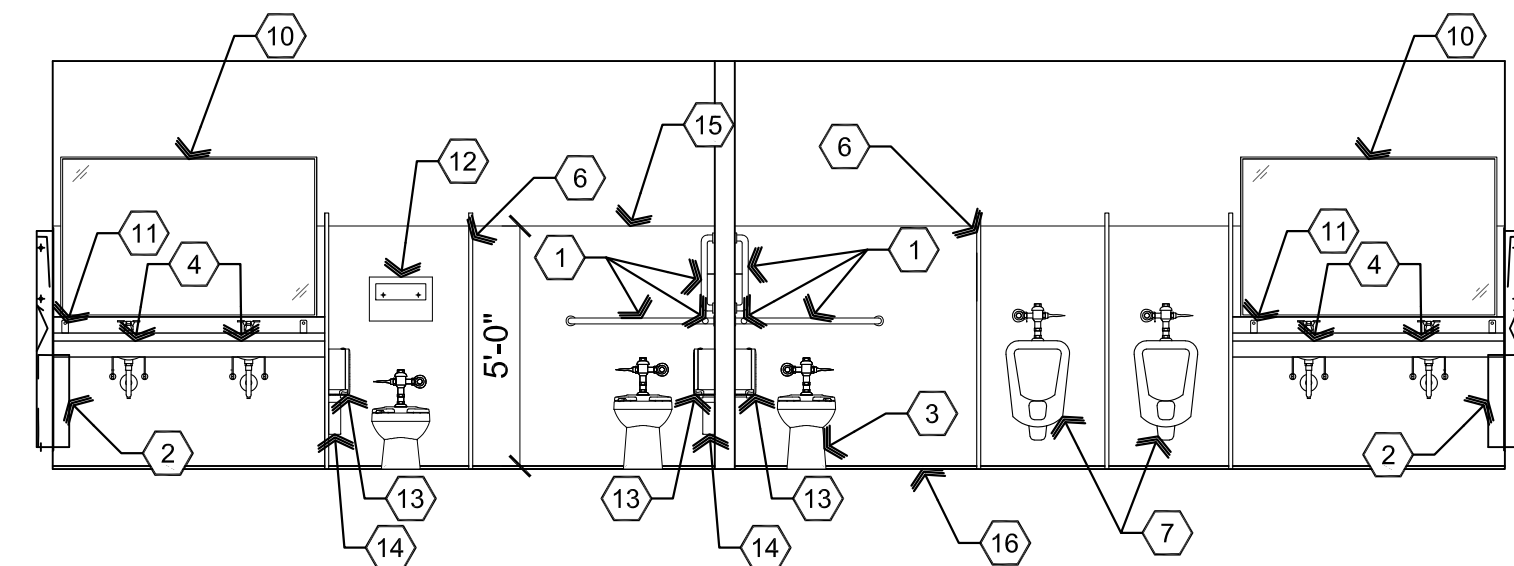
A3 Typical Fixture Mounting Heights

Scale: 1/2"=1'-0"



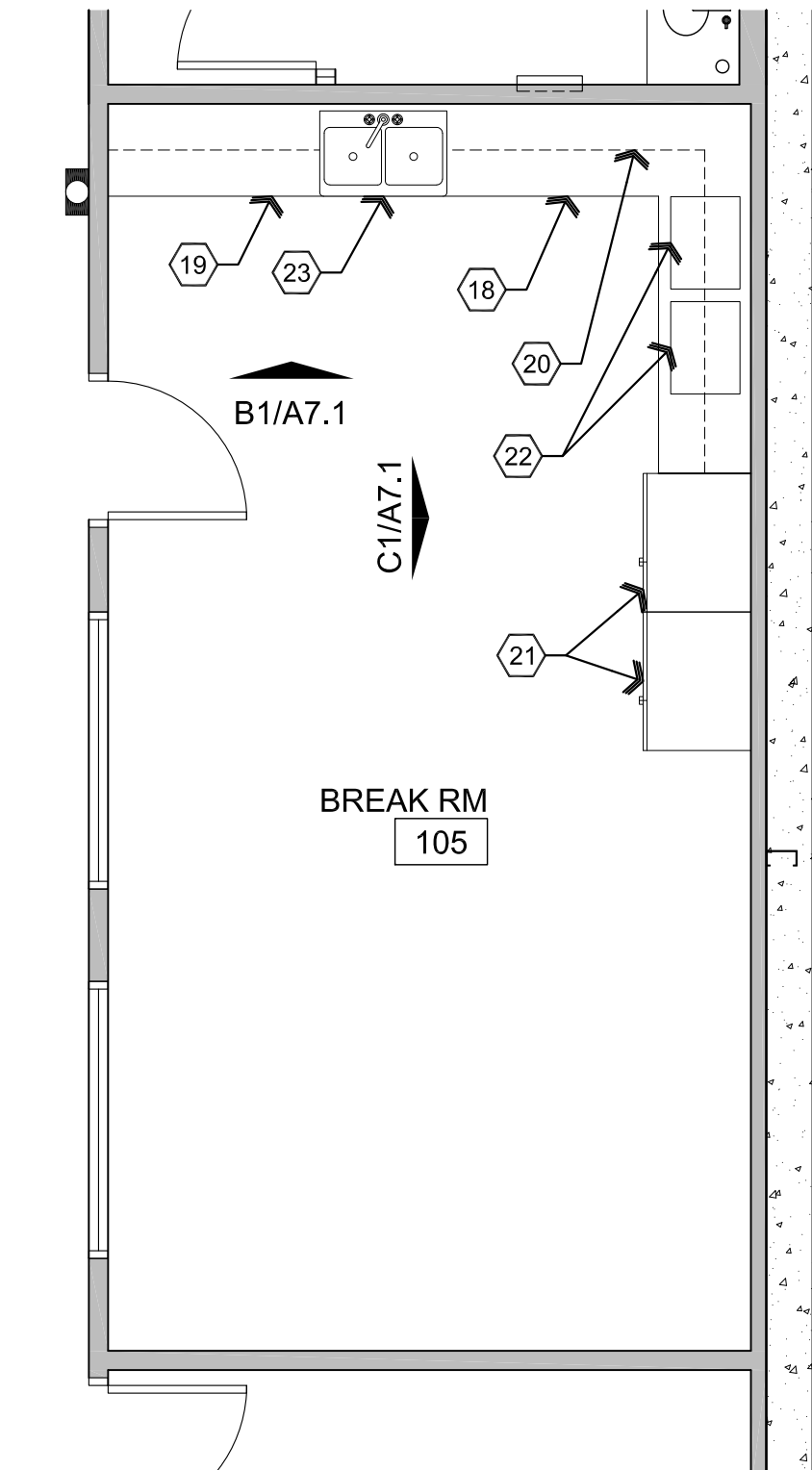
A2 Enlarged Floor Plan

Scale: 1/4"=1'-0"



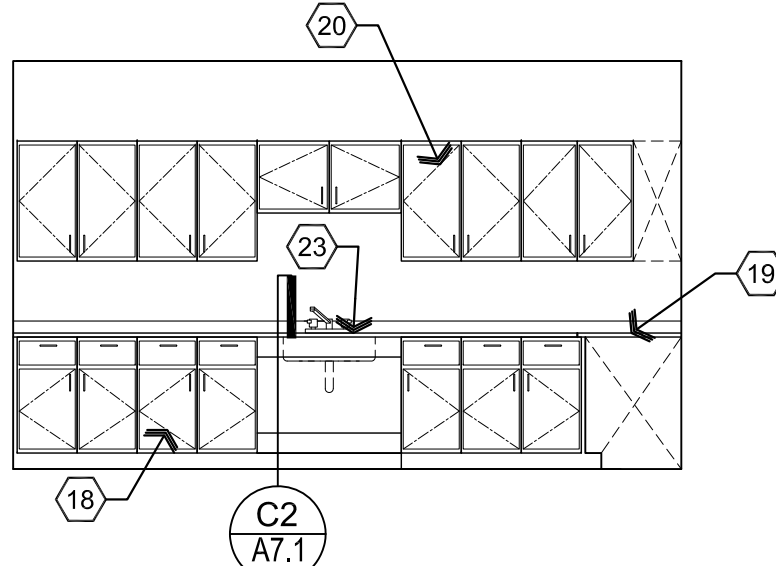
A1 Interior Elevation Restrooms

Scale: 1/4"=1'-0"



B2 Enlarged Floor Plan

Scale: 1/4"=1'-0"



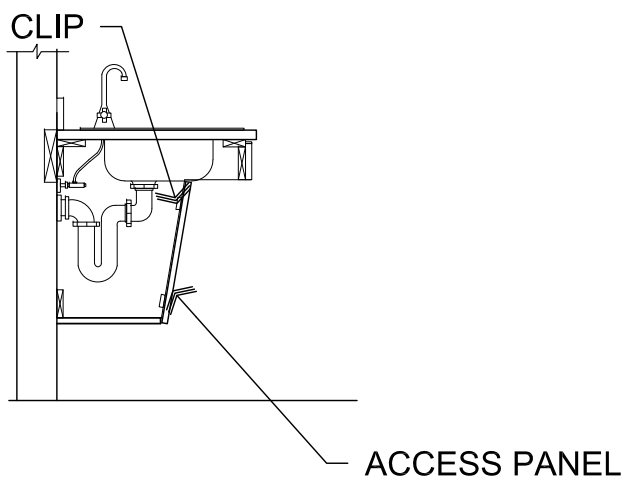
B1 Interior Elevation

Scale: 1/4"=1'-0"

Toilet Accessory Schedule					
CODE	FIXTURE	DESCRIPTION	MANUFACTURER	MODEL	COLOR
TA-1	PAPER TOWEL DISPENSER	RECESSED W/ TRASH	BOBRICK	B-3944	STAINLESS STEEL
TA-2	SANITARY NAPKIN RECEPTACLE	SURFACE MOUNTED	BOBRICK	B-35139	STAINLESS STEEL
TA-3	GRAB BARS 42", 36", 18"	1 1/4" DIAMETER	BOBRICK	B-5806	STAINLESS STEEL
TA-4	TOILET PAPER DISPENSER	TWIN 10" JUMBO	BOBRICK	B-2892	STAINLESS STEEL
TA-5	TOILET PARTITION	BY OWNER			

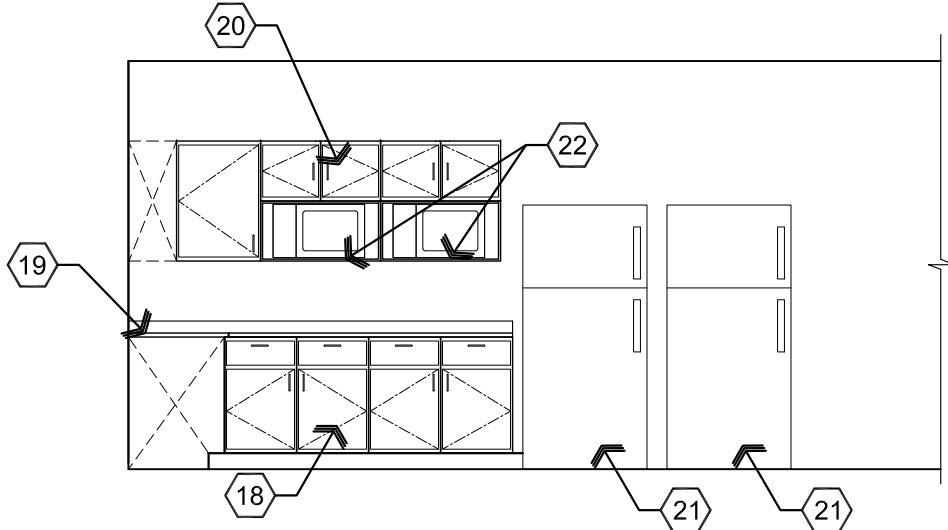
Descriptive Keynotes

1. PROVIDE 1-1/2" DIAMETER GRAB BARS PER A.D.A. REQUIREMENTS, 42" LONG AT SIDE OF WATER CLOSET / 36" LONG AT REAR OF WATER CLOSET / 18" VERTICAL GRAB BAR, PROVIDE SOLID BLOCKING. REFER TO TOILET ACCESSORY SCHEDULE. [TA-3]
2. PROVIDE PAPER TOWEL DISPENSER, REFER TO TOILET ACCESSORY SCHEDULE. [TA-1]
3. PROVIDE FLOOR MOUNTED WATER CLOSET, REFER TO PLUMBING DRAWINGS.
4. INTEGRAL LAVATORY IN SOLID SURFACE COUNTERTOP, BY OWNER, INSULATE PIPES, REFER TO PLUMBING PLANS.
5. PROVIDE ACCESSIBILITY SIGNAGE MOUNTED PER A.D.A. REQUIREMENTS.
6. PLASTIC LAMINATE TOILET PARTITIONS BY OWNER.
7. PROVIDE WALL HUNG URINAL, REFER TO PLUMBING PLANS.
8. PROVIDE FLOOR DRAIN, REFER TO PLUMBING PLANS.
9. 2"x2" FLOOR TO CEILING URINAL SCREEN POST BY OWNER.
10. PROVIDE 1/4" PLATE MIRROR.
11. HAND SOAP DISPENSER BY OWNER.
12. TOILET SEAT COVER DISPENSER BY OWNER.
13. PROVIDE TOILET PAPER DISPENSER, REFER TO TOILET ACCESSORY SCHEDULE. [TA-4]
14. PROVIDE SANITARY NAPKIN RECEPTACLE, REFER TO TOILET ACCESSORY SCHEDULE. [TA-2]
15. SOLID SURFACE WAINSCOT BY OWNER. REFER TO MATERIALS SCHEDULE. [SS-2]
16. SERVICE SINK, REFER TO PLUMBING PLANS.
17. PROVIDE HIGH / LOW DRINKING FOUNTAINS, REFER TO PLUMBING PLANS.
18. PLASTIC LAMINATE LOWER CABINETS, BY OWNER.
19. SOLID SURFACE COUNTERTOP WITH 4" BACKSPLASH BY OWNER. [SS-1]
20. PLASTIC LAMINATE UPPER CABINET, BY OWNER.
21. REFRIGERATOR BY OWNER.
22. MICROWAVE SHELF BY OWNER, PLATFORM BASE TO EXTEND 6" BEYOND FACE OF CABINETRY. (MICROWAVE SUPPLIED BY OWNER)
23. PROVIDE SINK AND FAUCET, REFER TO PLUMBING PLANS. (INTEGRAL SINK BY OWNER)
24. PROVIDE WATER HEATER, REFER TO PLUMBING PLANS.
25. SERVICE SINK, REFER TO PLUMBING PLANS.



C2 ADA Cabinet Section

Scale: 1/2"=1'-0"

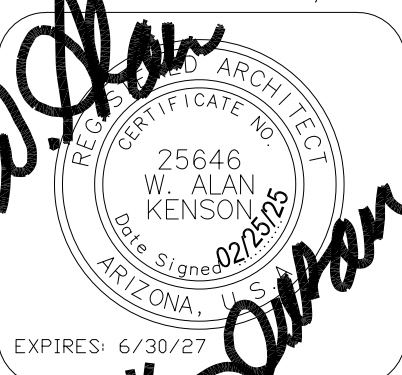


C1 Interior Elevation

Scale: 1/4"=1'-0"

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812
F 928-443-5815
P.O. Box 11593
Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Interior Elevations and Enlarged Plans

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

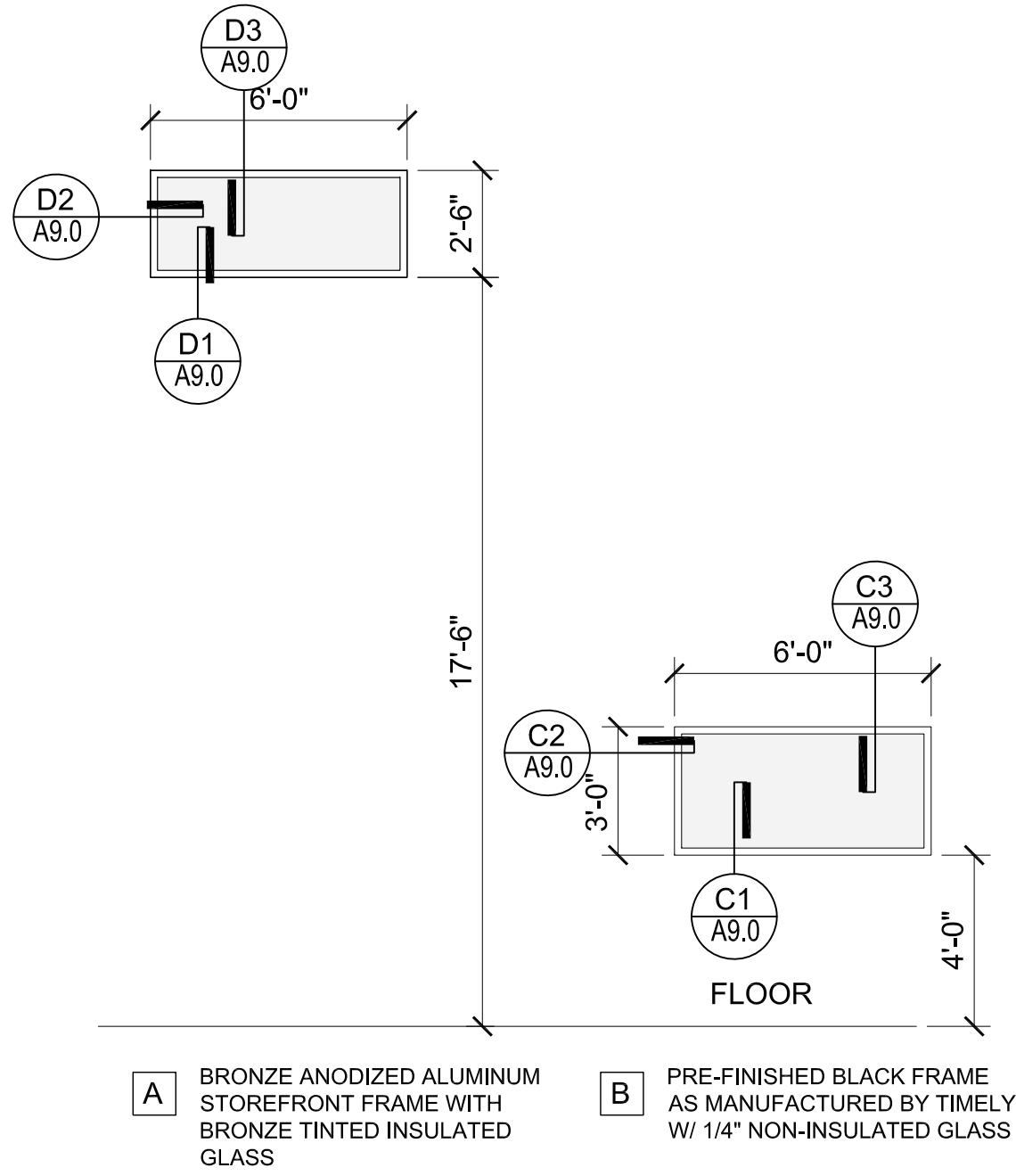
APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB NO. 803
SHEET

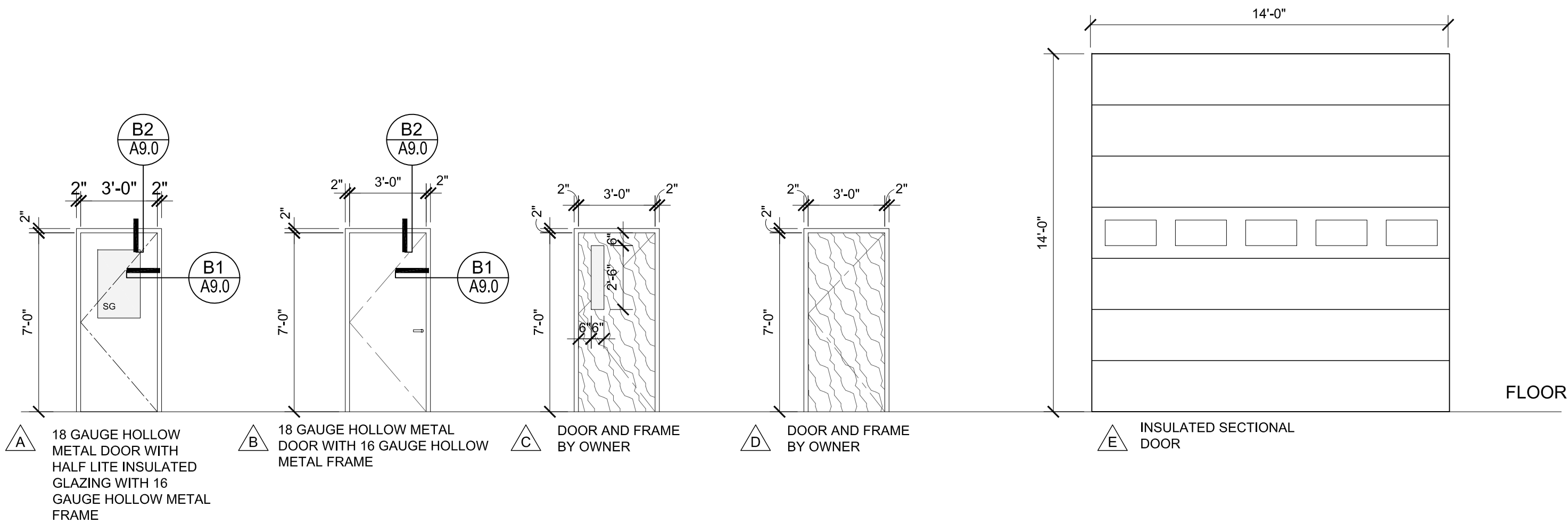
A7.1

Hardware Schedule	
HW-A	LEVER ENTRY LOCK, CHAIN STOP, WEATHER STRIP, THRESHOLD, DOOR BOTTOM, HINGES, CLOSER
HW-B	LEVER PRIVACY LOCK, WALL STOP, HINGES
HW-C	LEVER PASSAGE LOCK WALL STOP, HINGES, CLOSER
HW-D	ROLL-UP DOOR ELECTRIC OPERATOR
HW-E	STORAGE LOCK, HINGES

Door Schedule								
NO.	ROOM NAME	SIZE	TYPE	DOOR MATERIAL	DOOR FINISH	FRAME MATERIAL	FRAME FINISH	HARDWARE TYPE
100A	ASSEMBLY	3'-0"x7'-0"	A	HM / GLASS	PAINT	HM	PAINT	A
100B	ASSEMBLY	14'-0"x14'-0"	E	STEEL	PAINT	HM	PAINT	D
100C	ASSEMBLY	14'-0"x14'-0"	E	STEEL	PAINT	HM	PAINT	D
100D	ASSEMBLY	3'-0"x7'-0"	D	HM	PAINT	STEEL	PAINT	A
100E	ASSEMBLY	14'-0"x14'-0"	E	STEEL	PAINT	HM	PAINT	D
101A	FIRE RISER	3'-0"x7'-0"	B	HM	PAINT	HM	PAINT	A
102A	WOMEN'S RR	3'-0"x7'-0"	D	BY OWNER	BY OWNER	BY OWNER	BY OWNER	C
103A	MEN'S RR	3'-0"x7'-0"	D	BY OWNER	BY OWNER	BY OWNER	BY OWNER	C
104A	JANITOR	3'-0"x7'-0"	D	BY OWNER	BY OWNER	BY OWNER	BY OWNER	E
105A	BREAK ROOM	3'-0"x7'-0"	C	BY OWNER	BY OWNER	BY OWNER	BY OWNER	C
106A	OFFICE	3'-0"x7'-0"	C	BY OWNER	BY OWNER	BY OWNER	BY OWNER	B
107A	OFFICE	3'-0"x7'-0"	C	BY OWNER	BY OWNER	BY OWNER	BY OWNER	B
108A	OFFICE	3'-0"x7'-0"	C	BY OWNER	BY OWNER	BY OWNER	BY OWNER	B
NOTES: 1. ALL EXIT DOORS & HARDWARE SHALL COMPLY WITH THE 2018 I.B.C. AND I.F.C. 2. DOOR THRESHOLDS SHALL HAVE A MAX HEIGHT OF 1/2" FOR H.C. ACCESSIBILITY. THRESHOLD SHALL HAVE A MAXIMUM RISE OF 1/4" AND 1/2" RISE WHEN BEVELED WITH MAXIMUM 1:2 SLOPE. 3. ALL GLAZING IN DOORS SHALL BE SAFETY GLAZING. 4. ALL INTERIOR DOORS SHALL BE OPERABLE FOR EMERGENCY EXITING PURPOSES WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE NOR EFFORT. 5. ALL GLAZING WITHIN 24" OF OPENINGS SHALL BE SAFETY GLASS. 6. IF A DOOR HAS A CLOSER, THEN THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR. 7. DOOR HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE. HARDWARE REQUIRED FOR DOOR PASSAGE SHALL BE MOUNTED NO HIGHER THAN 48" ABOVE FINISH FLOOR. 8. DOOR OPENING FORCE SHALL BE: 5lbf MAX INTERIOR HINGED, SLIDING OR FOLDING DOORS; FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY.								



A1 Window Types
Scale: 1/4"=1'-0"



B1 Door Types

Scale: 1/4"=1'-0"

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Door and Window Schedule

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB NO. 803
SHEET

A8.0

Room Finish Schedule

NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING	HEIGHT	FLOOR:	WALLS:
100	ASSEMBLY	F1	B2	W1	C1	VARIES	F1 SEALED CONCRETE F2 UNFINISHED SHEATHING	W1 OPEN TO STRUCTURE / METAL WALL PANELS W2 PAINTED GPDW W3 FRP WAINSCOT W4 5'-0" HIGH SOLID SURFACE WAINSCOT BY OWNER
101	FIRE RISER	F1	B2	W1	C1	VARIES		
102	WOMEN'S RR	F1	B1	W2/W4	C3	8'-6"		
103	MEN'S RR	F1	B1	W2/W4	C3	8'-6"		
104	JANITOR	F1	B1	W2/W3	C3	8'-6"		
105	BREAK ROOM	F1	B1	W2	C2	8'-6"		
106	OFFICE	F1	B1	W2	C2	8'-6"		
107	OFFICE	F1	B1	W2	C2	8'-6"		
108	OFFICE	F1	B1	W2	C2	8'-6"		
200	STORAGE	F2	B2	W1	C1	VARIES		

FLOOR:
F1 SEALED CONCRETE
F2 UNFINISHED SHEATHING

BASE:
B1 RUBBER BASE
B2 NONE

WALLS:
W1 OPEN TO STRUCTURE / METAL WALL PANELS
W2 PAINTED GPDW
W3 FRP WAINSCOT
W4 5'-0" HIGH SOLID SURFACE WAINSCOT BY OWNER

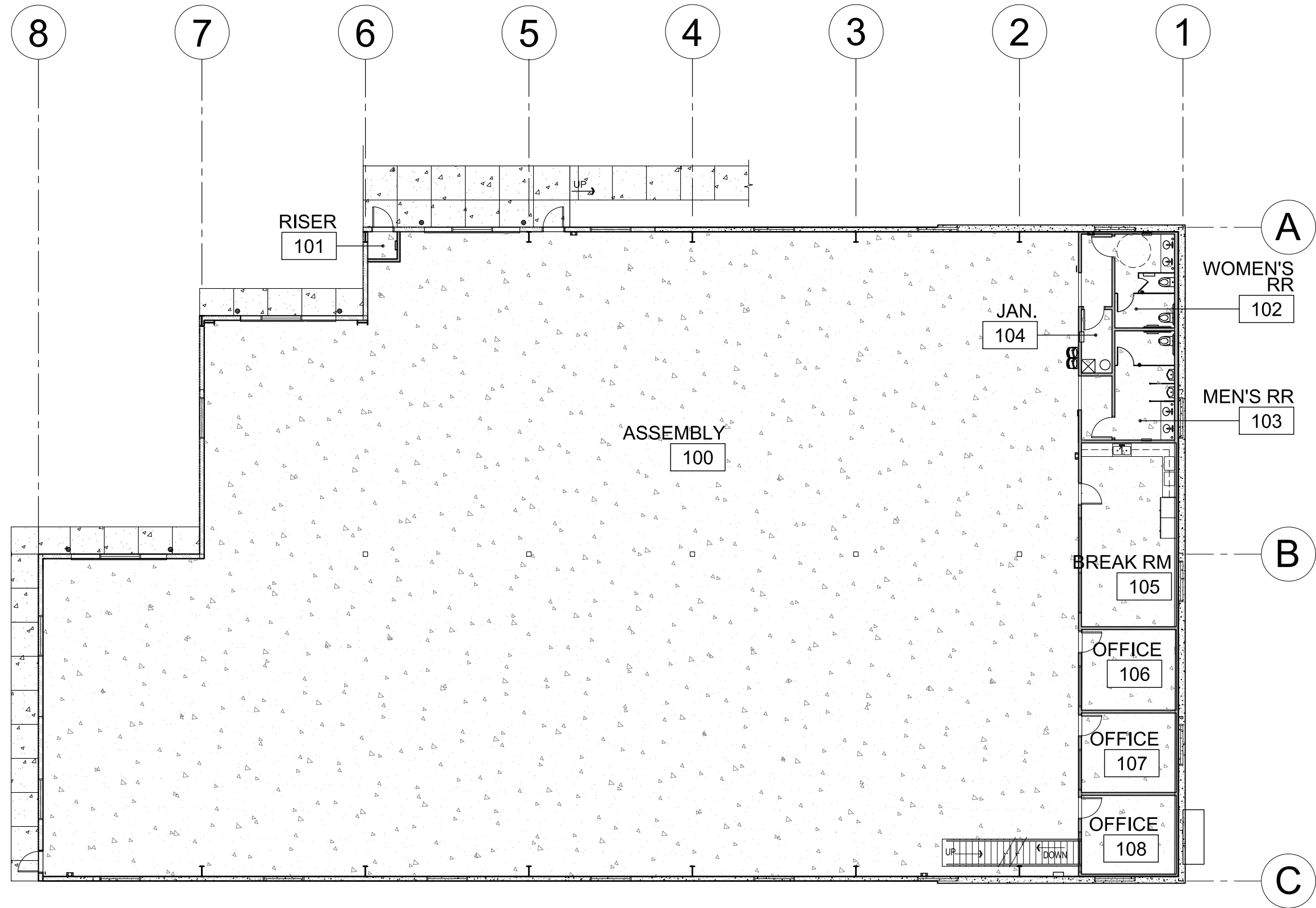
CEILING:
C1 OPEN TO STRUCTURE
C2 2x2 SUSPENDED ACOUSTICAL PANELS
C3 PAINTED GPDW

Materials schedule

CODE	MATERIAL	LOCATION	MANUFACTURER	SPECIFICATION
ACT-1	ACOUSTICAL CEILING TILE	REFER TO REFLECTED CEILING PLAN	ARMSTRONG	ASTM C 36; 2'x2' #770 NON DIRECTIONAL SQUARE LAY-IN TILE, WHITE SUSPENDED GRIDS; 15/16" METAL WHITE
FE-1	FIRE EXTINGUISHER	INTERIOR		2A10BC FIRE EXTINGUISHER IN SURFACE MOUNTED CABINET
FRP-1	FIBERGLASS REINFORCED PLASTIC	JANITOR		GRAY, 4' TALL WAINSCOT
M-1	METAL SIDING PANEL	EXTERIOR	MBCI	PBA PANEL 26 GAUGE, PRE PAINTED, COLOR TO BE DETERMINED (SIGNATURE 200)
M-2	METAL ROOF PANEL	ROOF	MBCI	24" ULTRADEK, 24 GAUGE, STANDING SEAM, GALVALUME
M-3	SHEET METAL DOWNSPOUT	EXTERIOR	MBCI	3-1/2" x4" BOX DOWNSPOUT, 26 GAUGE, PRE-PAINTED, COLOR TO BE DETERMINED (SIGNATURE 200)
M-4	SHEET METAL GUTTER	EXTERIOR	MBCI	3"x5" BOX GUTTER, 26 GAUGE, PRE-PAINTED, COLOR TO BE DETERMINED (SIGNATURE 200)
M-5	METAL TRIM	EXTERIOR	MBCI	26 GAUGE PRE-PAINTED, COLOR TO BE DETERMINED (SIGNATURE 200)
M-6	METAL RIDGE CAP	ROOF	MBCI	GALVALUME
PL-1	PLASTIC LAMINATE	BREAK ROOM CABINETS	BY OWNER	
PT-1	PAINT	GPDW WALLS AND CEILINGS	SHERWIN WILLIAMS	SELECTED BY OWNER
RB-1	RUBBER BASE	OFFICES	ROPPE	BLACK / BROWN
SS-1	SOLID SURFACE COUNTERTOP	BREAKROOM / RESTROOMS	BY OWNER	
SS-2	SOLID SURFACE WALLS - WAINSCOT	RESTROOMS	BY OWNER	

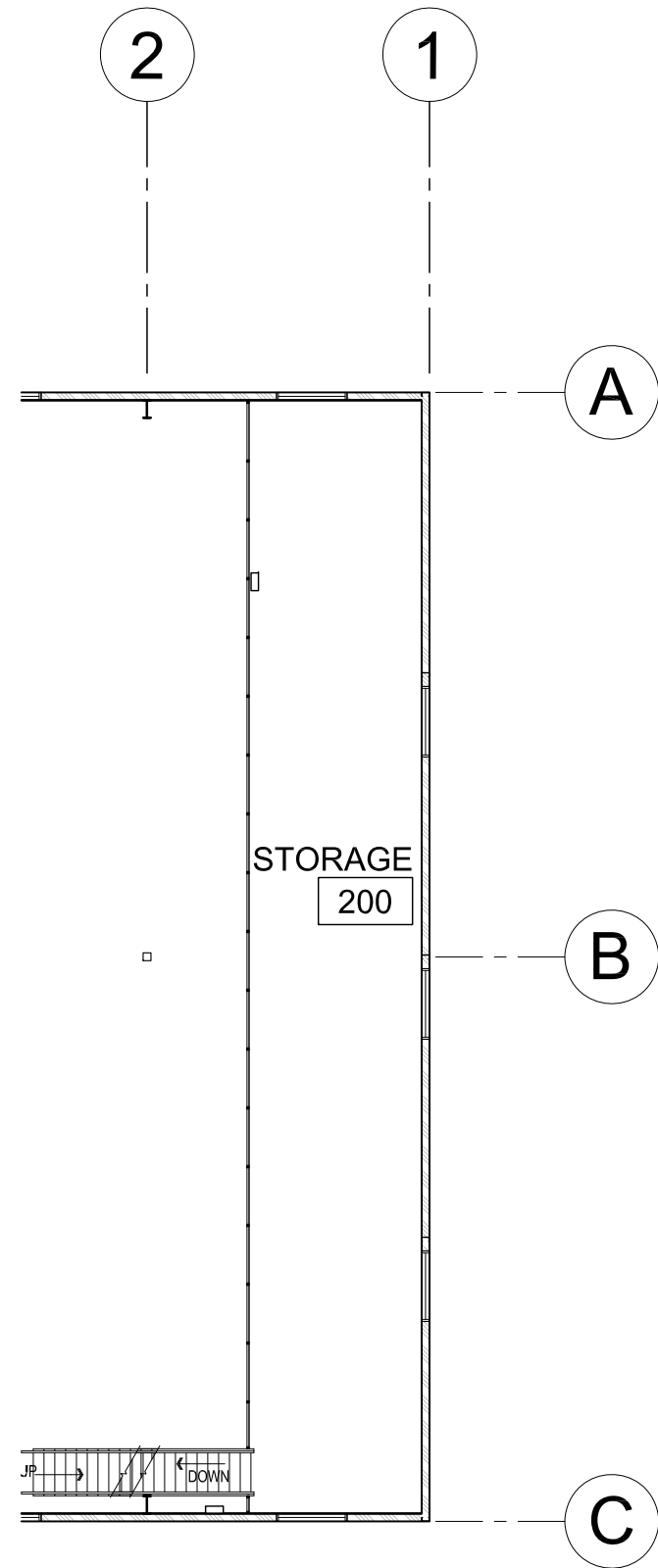
XX- #

Legend



A1 First Floor Room Finish Plan

Scale: 1/16"=1'-0"



B1 Second Floor Room Finish Plan

Scale: 1/16"=1'-0"



REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812
F 928-443-5815
email: wakaarchitect@gmail.com
www.kenson-associates.com

European Techniques 7
6686 Inter Cal Way
Prescott, AZ
103-50-019

ARCHITECTURE & PLANNING

DRAWING: Materials Schedule and Room Finish Plan

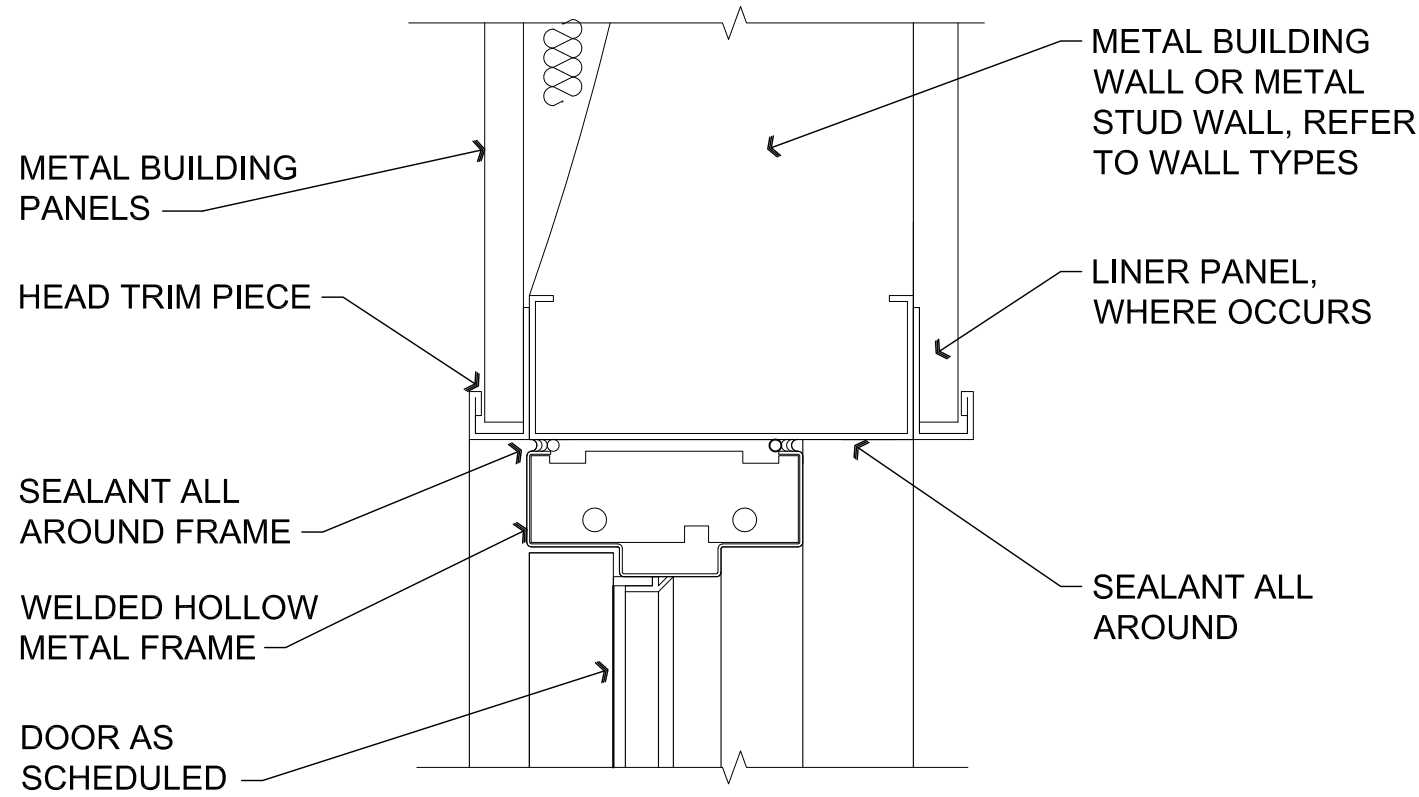
PROJECT:

APN:

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB. NO. 803
SHEET

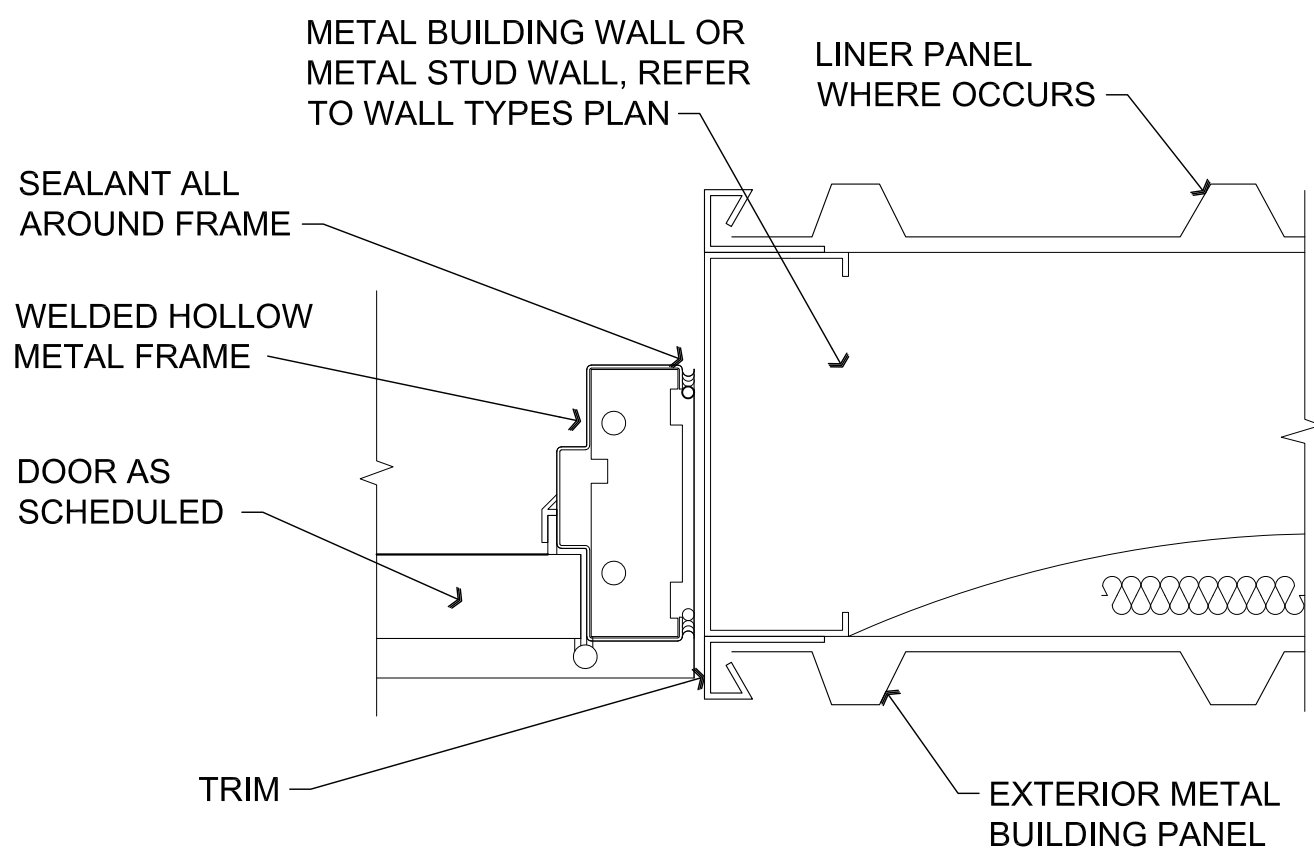
A8.1

Feb 25, 2025 - 12:15pm



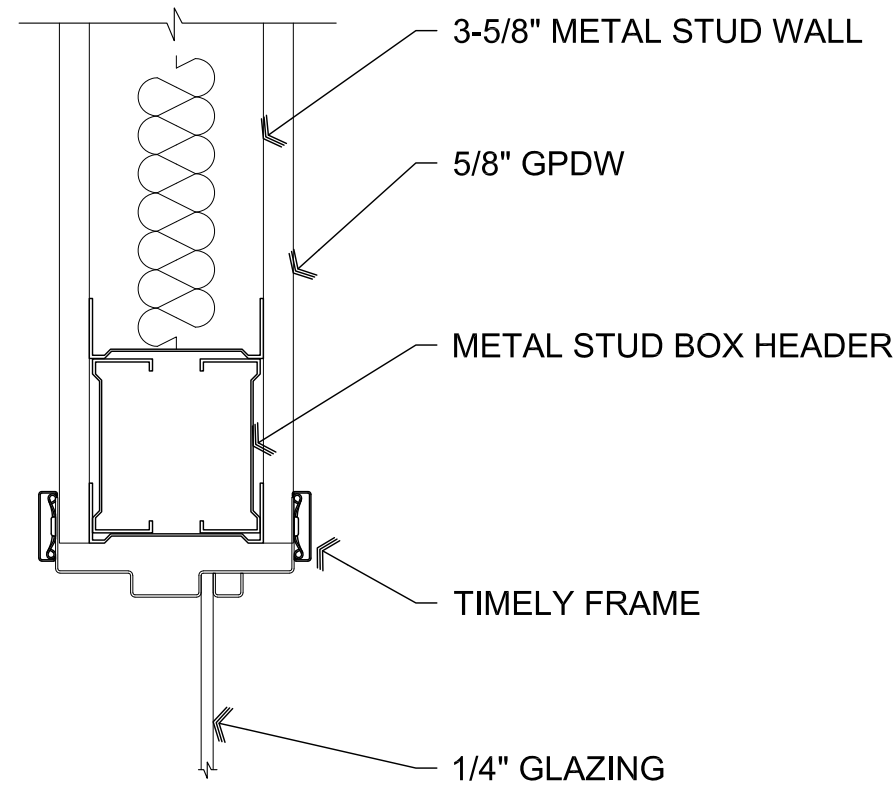
B2 Door Head

SCALE: 3" = 1'-0"



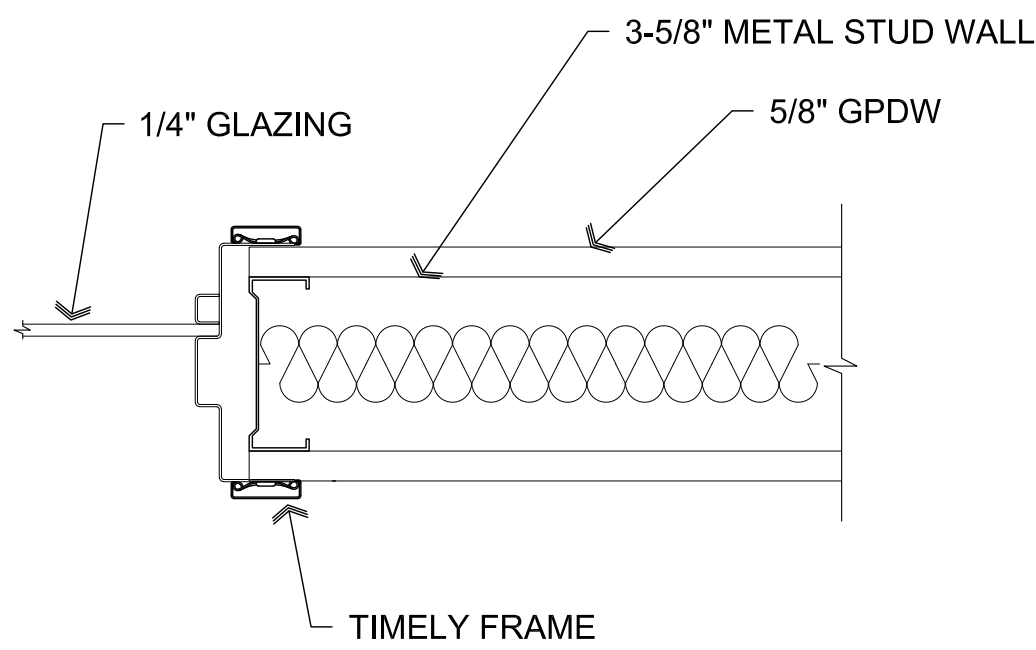
B1 Door Jamb

SCALE: 3" = 1'-0"



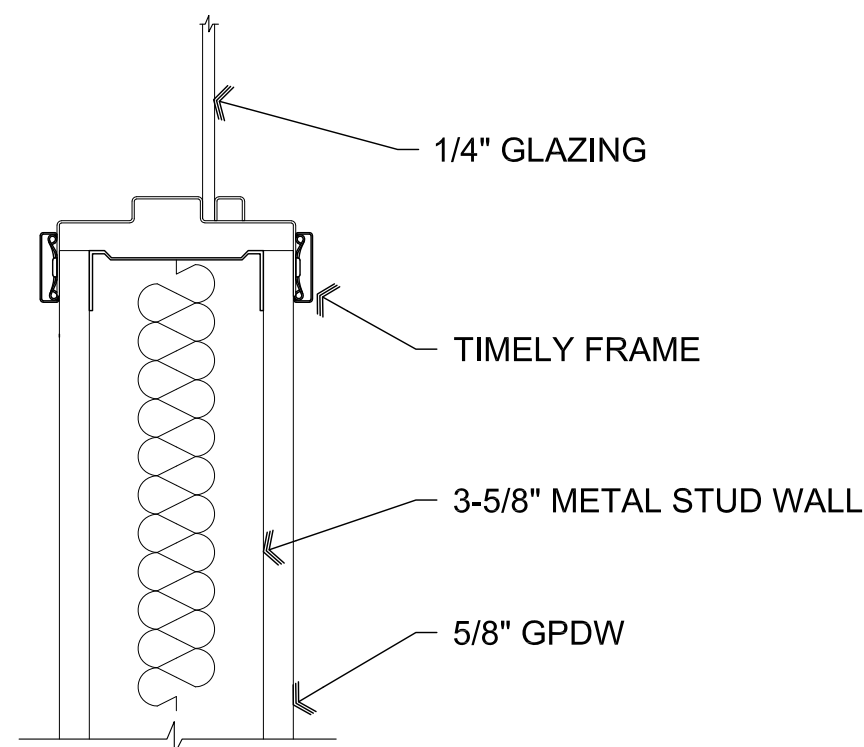
C3 Window Head

SCALE: 3" = 1'-0"



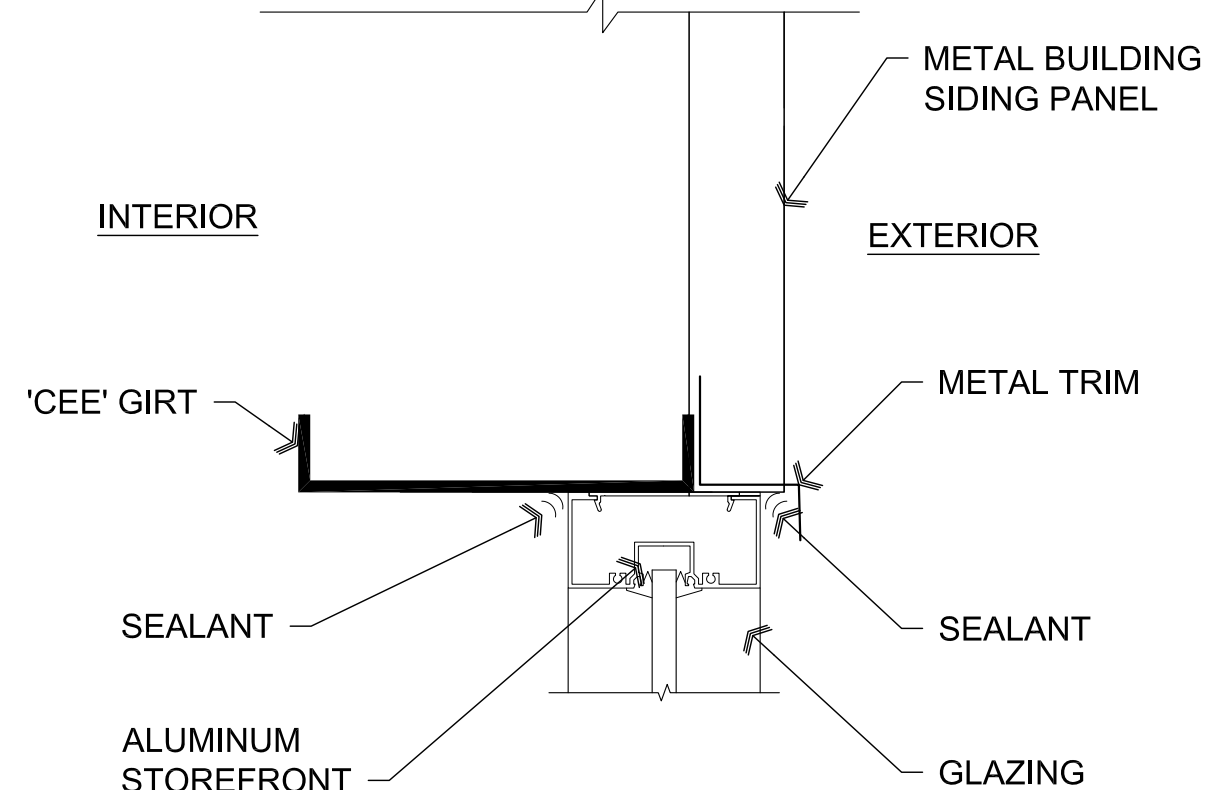
C2 Window Jamb

SCALE: 3" = 1'-0"

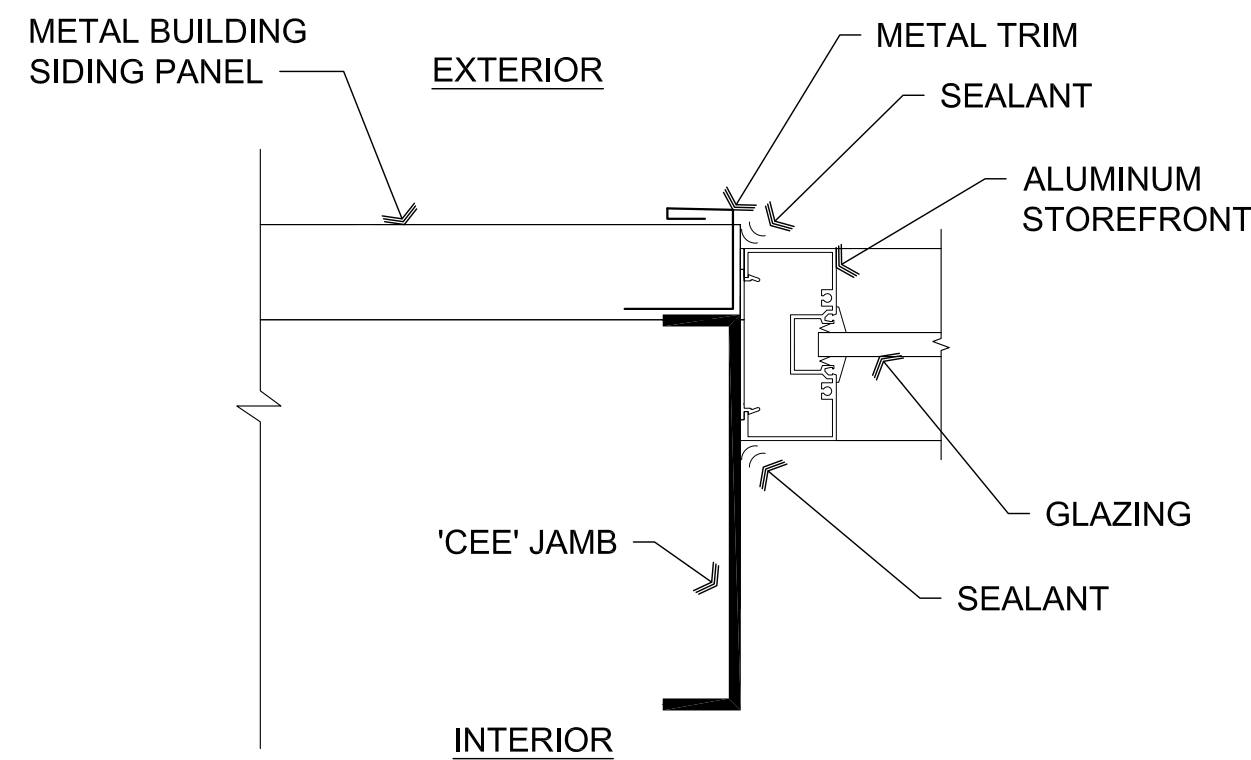


C1 Window Sill

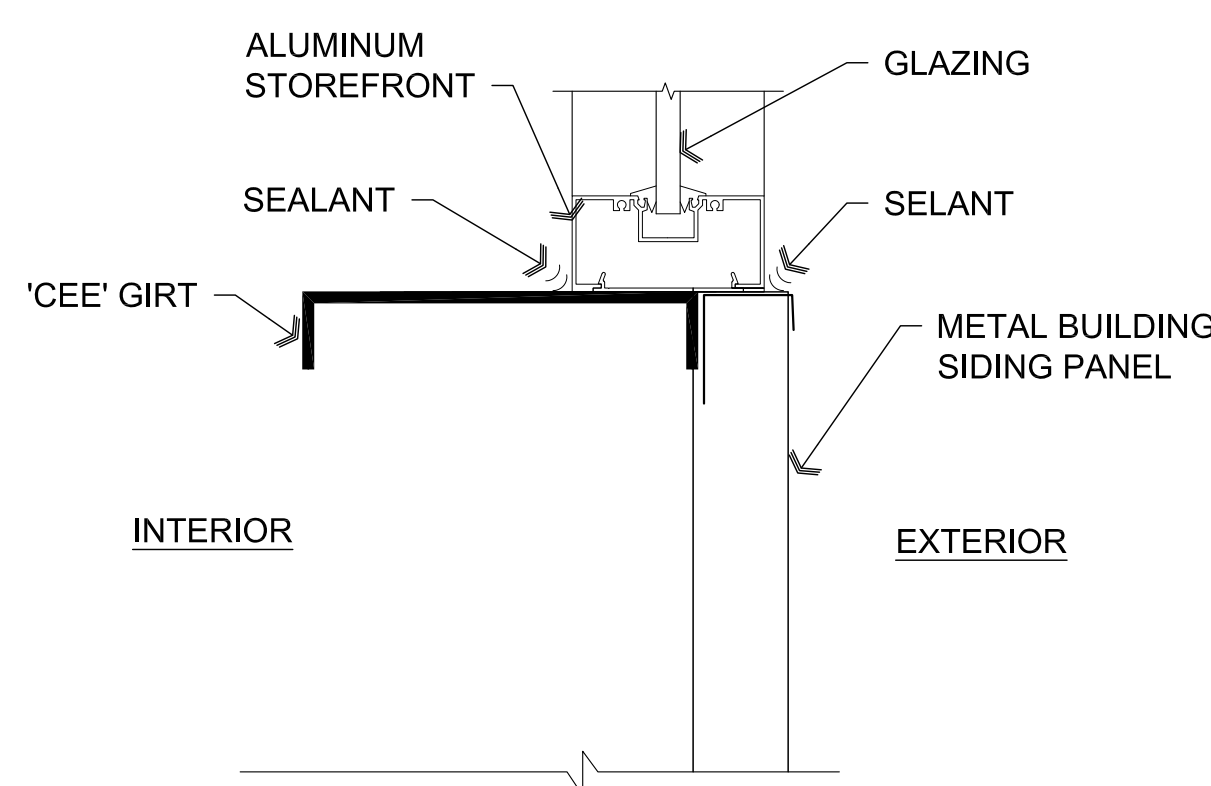
SCALE: 3" = 1'-0"



D3 Window Head @ Metal Wall



D2 Window Jamb @ Metal Wall



D1 Window Sill @ Metal Wall

W. Alan Kenson & Associates, P.C.

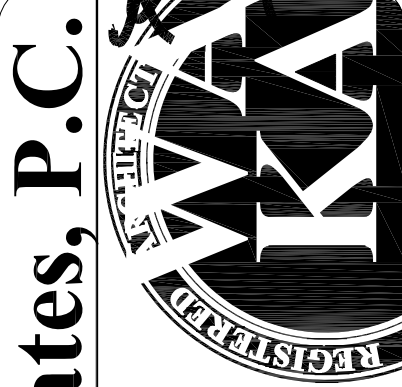
P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

DRAWING: Details
PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ
APN: 103-50-019

DRAWN BY L.O.
CHECKED BY W.A.K.
DATE February 25th, 2025
JOB NO. 803
SHEET

A9.0

ARCHITECTURE & PLANNING



These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.

GENERAL REQUIREMENTS:

1. THE STRUCTURAL SYSTEMS AND MEMBERS DEPICTED HEREIN HAVE BEEN DESIGNED PRIMARILY TO SAFEGUARD AGAINST MAJOR STRUCTURAL DAMAGE AND LOSS OF LIFE, NOT TO LIMIT DAMAGE OR MAINTAIN FUNCTION (IBC SECTION 101.3).
2. THESE DRAWINGS, AND THEIR ASSOCIATED STRUCTURAL CALCULATIONS, HAVE BEEN PERFORMED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE STRUCTURAL ENGINEERS IN THIS OR SIMILAR LOCALITIES. THEY NECESSARILY ASSUME THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKMEN WHO HAVE A WORKING KNOWLEDGE OF THE INTERNATIONAL BUILDING CODE CONVENTIONAL FRAMING REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR FRAMING ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, IT IS UNDERSTOOD THAT THE CONTRACTOR WILL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR ALL MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
3. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN. TYPICAL DETAILS AND NOTES ARE NOT NECESSARILY INDICATED ON THE PLANS, BUT SHALL APPLY. NONE-THE-LESS, WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT. DETAILS MAY SHOW ONLY ONE SIDE OF CONNECTION OR MAY OMIT INFORMATION FOR CLARITY.
4. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL WITH APPROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH THE ARCHITECT AND STRUCTURAL ENGINEER.
5. ANY INSPECTIONS, SPECIAL (IBC CHAPTER 17) OR OTHERWISE THAT ARE REQUIRED BY THE BUILDING CODE, LOCAL BUILDING DEPARTMENTS, OR BY THESE PLANS SHALL BE DONE BY AN INDEPENDENT INSPECTION COMPANY OR THE BUILDING DEPARTMENT. SITE VISITS BY THE STRUCTURAL ENGINEER DO NOT CONSTITUTE AN OFFICIAL INSPECTION, UNLESS SPECIFICALLY CONTRACTED FOR.
6. SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL ITEMS IN ADDITION TO ITEMS REQUIRED BY ARCHITECTURAL SPECIFICATIONS. THE CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMITTAL. ITEMS NOT IN ACCORDANCE WITH CONTRACT DRAWINGS SHALL BE FLAGGED UPON HIS REVIEW. VERIFY ALL DIMENSIONS WITH ARCHITECT. ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM ORIGINAL CONTRACT DRAWINGS SHALL BE CLOUDED. ANY OF THE AFOREMENTIONED WHICH ARE NOT CLOUDED OR FLAGGED BY SUBMITTING PARTIES, SHALL NOT BE CONSIDERED APPROVED AFTER THE STRUCTURAL ENGINEER'S REVIEW, UNLESS NOTED. ACCORDINGLY, ANY STRUCTURAL ENGINEERING PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF A STRUCTURAL ENGINEER REGISTERED IN THE APPROPRIATE STATE. THE SHOP DRAWINGS DO NOT REPLACE THE ORIGINAL CONTRACT DRAWINGS. ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER ARE NOT TO BE CONSIDERED CHANGES TO ORIGINAL DRAWINGS. THE ADEQUACY OF ENGINEERING DESIGNS AND LAYOUT PERFORMED BY THE OTHERS RESTS WITH THE DESIGNING OR SUBMITTING AUTHORITY. REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS. RESPONSIBILITY FOR CORRECTNESS SHALL REST WITH THE CONTRACTOR. ALLOW (5) WORKING DAYS FOR THE STRUCTURAL ENGINEER'S REVIEW. ONE COPY OF EACH SUBMITTAL WILL BE RETAINED FOR THE STRUCTURAL ENGINEER'S RECORDS.

BASIS FOR DESIGN:

1. BUILDING CODE: 2018 EDITION OF THE IBC WITH CITY/COUNTY AMENDMENTS.
- RISK CATEGORY = II
2. VERTICAL LOADS:
- | LOCATION | LIVE / SNOW LOAD | DEAD LOAD |
|-----------------|------------------|-----------|
| ROOF | 30 PSF | 5 PSF |
| MEZZANINE FLOOR | 125 PSF | 15 PSF |
| STAIRS | 125 PSF | 25 PSF |

3. SEISMIC DESIGN PARAMETERS:
- | ANALYSIS PROCEDURE | EQUIVALENT LATERAL FORCE PROCEDURE |
|-------------------------------------|------------------------------------|
| IMPORTANCE FACTOR | le = 1.00 |
| SITE CLASS | C |
| SEISMIC DESIGN CATEGORY | B |
| SPECTRAL RESPONSE ACCELERATIONS | Sms = 0.442, Sm1 = 0.156 |
| SPECTRAL RESPONSE COEFFICIENTS | Sds = 0.295, Sd1 = 0.104 |
| HORIZONTAL SHEAR TRANSFER ELEMENTS: | |
| X-BRACE(S) | R = 3.0 |
| VERTICAL SHEAR TRANSFER ELEMENTS: | |
| X-BRACE(S) | R = 3.0 |
| RIGID STEEL FRAME(S) | R = 3.0 |
4. WIND DESIGN PARAMETERS (STRENGTH):
- | | |
|---------------------------------|-------------------------|
| ULTIMATE WIND SPEED | 100 MPH (3 SECOND GUST) |
| WIND EXPOSURE | C |
| INTERNAL PRESSURE COEFFICIENT | +/-0.18 |
| COMPONENT AND CLADDING PRESSURE | 22.9 PSF |
| NET UPLIFT ON ROOF | 34.8 PSF |

FOUNDATION NOTES:

1. FOUNDATIONS DESIGNED IN CONFORMANCE WITH RECOMMENDATIONS BY: **ENGINEERING TESTING CONSULTANTS, INC. REPORT NO. 6520 DATED JULY 12, 2007. ADDENDUM DATED DECEMBER 5, 2024.**
2. SITE PREPARATION AND GRADING REQUIREMENTS OF THE SOIL REPORT AND ANY ADDENDUMS SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF FOUNDATIONS. ANY TESTS OR INSPECTIONS REQUIRED BY THE SOIL REPORT SHALL BE PERFORMED PRIOR TO PLACEMENT OF FOUNDATION REINFORCING STEEL OR CONCRETE. ALTERATIONS TO SITE PREPARATION OR GRADING SHALL BE REPORTED TO THE GEOTECHNICAL ENGINEER PRIOR TO FOUNDATION CONSTRUCTION.
- THE SOIL DESIGN VALUES FOR THE FOUNDATION ARE:
- | | |
|--|------------|
| ALLOWABLE BEARING PRESSURE | 2500 PSF |
| ALLOWABLE PASSIVE PRESSURE | 150 PSF/FT |
| ALLOWABLE COEFFICIENT OF FRICTION | 0.25 |
| LATERAL BACKFILL PRESSURE (UNRESTRAINED) | 30 PSF/FT |
| LATERAL BACKFILL PRESSURE (RESTRAINED) | 50 PSF/FT |
| SITE CLASS | C |
3. A ONE-THIRD INCREASE IN BEARING PRESSURES IS ALLOWED WITH SEISMIC OR WIND LOAD COMBINATIONS. LATERAL BEARING AND LATERAL SLIDING RESISTANCE MAY BE COMBINED.

FOUNDATION BEARING DEPTH	
30" BELOW FINISHED GRADE	

4. ALL FOUNDATIONS SHALL BEAR ON UNDISTURBED NATURAL SOIL 30 INCHES MINIMUM BELOW FINISH GRADE. GRADE IS DEFINED AS TOP OF SLAB FOR INTERIOR FOOTINGS AND LOWEST ADJACENT GRADE WITHIN 5 FEET OF THE BUILDING FOR PERIMETER FOOTINGS. WHERE EXTERIOR PAVING OR CONCRETE IS DIRECTLY ADJACENT TO BUILDING, GRADE IS DEFINED AS TOP OF EXTERIOR PAVING AT LEAST 5 FEET FROM BUILDING. CONCRETE FOOTING EXCAVATIONS SHALL BE CLEAN AND FREE OF LOOSE DEBRIS OR UN-COMPACTED MATERIAL AT TIME OF CONCRETE PLACEMENT.
5. INTERIOR CONCRETE SLABS ON GRADE SHALL BE SUPPORTED ON A 4 INCH LAYER OF SELECT FILL MATERIAL OVER AN ADDITIONAL 12 INCHES OF NON-EXPANSIVE, IMPORTED, GRANULAR FILL MATERIAL ACCORDING TO THE SPECIFICATIONS OF THE SOIL REPORT.
- FILL MATERIAL SHOULD BE MOISTENED, BUT NOT SATURATED JUST PRIOR TO PLACING CONCRETE.

WOOD:

1. PLYWOOD: ALL PLYWOOD SHALL BE C-D OR C-C SHEATHING CONFORMING TO STANDARD PS 1-09. LAY UP PLYWOOD WITH FACE GRAIN IN PERPENDICULAR TO SUPPORTS (ON ROOFS WHERE PLYWOOD IS LAID UP WITH FACE GRAIN PARALLEL TO SUPPORTS, USE A MINIMUM OF 5-PLY PLYWOOD, STAGGER JOINTS). ALL NAILING, COMMON NAILS. BLOCKING AT PANEL EDGES WHERE INDICATED ON PLANS. ALL PLYWOOD SHALL BE OF THE FOLLOWING NOMINAL THICKNESS, SPAN/INDEX RATING AND SHALL BE NAILED AS FOLLOWS UNLESS NOTED OTHERWISE ON THE PLANS:

LOCATION	NOMINAL THICKNESS	SPAN INDEX RATING	EDGE ATTACHMENT:	FIELD ATTACHMENT:
WALLS	½" OR ¾"	2/4	#8 SIMPSON PPHD SCREWS AT 6" O.C.	#8 SIMPSON PPHD SCREWS AT 12" O.C.
FLOOR	¾" T&G	4/24	#10 SIMPSON PPHD SCREWS AT 6" O.C.	#10 SIMPSON PPHD SCREWS AT 12" O.C.

PLYWOOD ALTERNATE: AMERICAN PLYWOOD ASSOCIATION PERFORMANCE RATED SHEATHING MAY BE USED AS AN ALTERNATE TO PLYWOOD WITH PRIOR APPROVAL OF OWNER, ARCHITECT AND ROOFER. IT MAY NOT BE USED ON ROOFS WHERE BUILT-UP ROOF SYSTEM IS TO BE GUARANTEED BY ROOFER. RATED SHEATHING SHALL COMPLY WITH DOC PS 2-10 EXPOSURE 1, AND SHALL HAVE A SPAN RATING EQUIVALENT TO OR BETTER THAN THE PLYWOOD IT REPLACES. ATTACHMENT AND THICKNESS (WITHIN ½") SHALL BE THE SAME AS THE PLYWOOD IT REPLACES. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

GENERAL STRUCTURAL NOTES

(APPLY UNLESS NOTED OTHERWISE ON PLANS/DETAILS)

CONCRETE:

1. MINIMUM 28 DAY CONCRETE STRENGTH SHALL BE AS FOLLOWS:
- | USE: | CONCRETE STRENGTH: | REMARKS: |
|-------------------------|--------------------|-----------------------|
| FOUNDATIONS | 3000 PSI | DESIGNED FOR 2500 PSI |
| CONCRETE SLABS ON GRADE | 3000 PSI | W/O INSPECTION |
| CONCRETE WALLS | 3500 PSI | . |
2. ALL NORMAL WEIGHT CONCRETE SHALL BE REGULAR WEIGHT OF 150 POUNDS PER CUBIC FOOT USING HARD-ROCK AGGREGATES. AGGREGATE USED IN CONCRETE SHALL CONFORM TO ASTM C67 FOR ¾", ASTM C57 FOR 1" AND ASTM C467 FOR 1½" AGGREGATE.
3. TENSION LAP SPLICES OF REINFORCING STEEL IN CONCRETE SHALL BE AS FOLLOW:
- | REBAR SIZE | STANDARD LAP | RETAINING WALLS (AT FACE OF WALL) |
|------------|--------------|-----------------------------------|
| #3 | 20" | 20" |
| #4 | 32" | 41" |
| #5 | 39" | 51" |
| #6 | 47" | 61" |

LAP SPLICES FOR BEAMS AND FLOOR SLABS SHALL BE ACCORDING TO CHAPTER 12 OF ACI 318 OR LAP SCHEDULE ON THESE DRAWINGS.

NO TACK WELDING OF REINFORCING BARS ALLOWED WITHOUT PRIOR REVIEW OF PROCEDURE WITH THE STRUCTURAL ENGINEER. LATEST ACI CODE AND DETAILING MANUAL APPLY. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT ALL CORNERS AND INTERSECTIONS PER TYPICAL DETAILS. VERTICAL WALL BARS SHALL BE SPLICED AT OR NEAR FLOOR LINES.

4. ALL DIMENSIONS SHOWING THE LOCATION OF REINFORCING STEEL NOT NOTED AS "CLEAR" OR "CLR" ARE TO CENTER OF STEEL MINIMUM COVER FOR NON-PRESTRESSED CONCRETE. REINFORCING SHALL BE AS FOLLOWS:

LOCATION:	MINIMUM COVER	TOLERANCE
CAST AGAINST EARTH (FOOTINGS)	3"	± ¾"
SLABS ON GRADE	1½"	± ¾"
EXPOSED TO EARTH OR WEATHER - #5 AND SMALLER	1½"	± ¾"
EXPOSED TO EARTH OR WEATHER - #6 AND LARGER	2"	± ¾"
STRUCTURAL SLABS AND WALLS	¾"	¾"

5. MAXIMUM SLUMP FOR ALL CONCRETE SHALL BE 4". SLUMP FOR EXTERIOR SLABS SHALL BE 6". PORTLAND CEMENT SHALL CONFORM TO ASTM C150. TYPE V CEMENT SHALL BE USED FOR CONCRETE IN CONTACT WITH ALKALINE SOIL, AND TYPE II ELSEWHERE.
6. NO MORE THAN 90 MINUTES SHALL ELAPSE BETWEEN CONCRETE BATCHING AND CONCRETE PLACEMENT UNLESS APPROVED BY THE TESTING AGENCY.
7. CONCRETE PLACEMENT AND QUALITY SHALL BE PER RECOMMENDATIONS IN ACI 614, ACI 301 AND ACI 318. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THAT SLABS ON GRADE NEED BE VIBRATED ONLY AROUND AND UNDER FLOOR DUCTS, ETC. CAST CLOSURE POUR, WHERE SHOWN ON PLANS AROUND COLUMNS AFTER COLUMN DEAD LOAD IS APPLIED. REMOVE ALL DEBRIS FROM FORMS BEFORE PLACING CONCRETE.
- ALL ITEMS TO BE CAST IN CONCRETE SUCH AS REINFORCING, DOWELS, BOLTS, ANCHORS, PIPES, SLEEVES, ETC., SHALL BE SECURELY POSITIONED IN THE FORMS BEFORE PLACING THE CONCRETE.
8. ALL CONCRETE SLABS ON GRADE SHALL BE DIVIDED INTO AREAS BY CONTROL JOINTS (KEYED OR SAW CUT) SUCH THAT ONE SLAB AREA DOES NOT EXCEED 250 SQUARE FEET, OR BE MORE THAN TWO TIMES LONGER THAN THE SLAB AREA WIDTH. THE FOUNDATION PLAN SHOWS A SUGGESTED METHOD OF CONTROL JOINT LAYOUT. IT IS RECOMMENDED THAT SAW CUTS BE MADE WITHIN 16 HOURS OF CONCRETE BATCHING.
- KEYED CONTROL JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING POURING. ALL OTHER JOINTS MAY BE SAW CUT.
9. HORIZONTAL PIPES AND ELECTRICAL CONDUITS SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE AND SLABS ON GRADE EXCEPT WHERE SPECIFICALLY APPROVED OR NOTED BY THE STRUCTURAL ENGINEER. PIPES AND CONDUITS SHALL NOT IMPAIR THE STRENGTH OF THE WORK.
10. FLY ASH MAY BE USED ONLY IF PERMITTED BY ARCHITECTURAL SPECIFICATIONS AND SHALL BE LIMITED TO 18 PERCENT OF CEMENTITIOUS MATERIALS AND SHALL HAVE A REPLACEMENT FACTOR OF 1.2 RELATIVE TO CEMENT REPLACED. NO FLY ASH ADDITIVES SHALL BE USED IN FLATWORK OR ARCHITECTURALLY EXPOSED CONCRETE.
11. COLD/HOT WEATHER CONCRETE CONSTRUCTION: PROTECT CONCRETE FROM DAMAGE OR REDUCED STRENGTH IN COMPLIANCE WITH ACI 305 AND 306.

REINFORCING STEEL:

1. ASTM A615 GRADE 60 (FY = 60 KSI) DEFORMED BARS FOR ALL BARS #5 AND LARGER. ASTM A615 GRADE 40 (FY = 40 KSI) DEFORMED BARS FOR ALL BARS #4 AND SMALLER. GRADE 60 DEFORMED BARS SHALL BE USED FOR CONCRETE WALLS, BEAMS, ELEVATED SLABS AND COLUMN REINFORCING.
2. WELDING OF REINFORCING BARS SHALL BE MADE ONLY TO ASTM A706 GRADE 60 BARS AND ONLY USING E60 SERIES RODS. WELDING OF REINFORCING BARS SHALL BE MADE ONLY AT LOCATIONS SHOWN ON PLANS OR DETAILS.
3. REINFORCING BAR SPACING GIVEN ARE MAXIMUM ON CENTERS. ALL BARS PER CRSI SPECIFICATIONS AND HANDBOOK. DOWEL ALL VERTICAL REINFORCING TO FOUNDATION. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE.

STEEL:

1. MATERIALS: ROLLED W SHAPES, SHALL CONFORM TO ASTM A992 (FY=50 KSI). ALL OTHER STRUCTURAL STEEL SHAPES, ROLLED SECTIONS, BARS AND PLATES SHALL CONFORM TO ASTM A36 (FY = 36 KSI). ALL PIPE STEEL SHALL BE ASTM A501 (FY = 36 KSI) OR ASTM A53, TYPE E OR S, GRADE B (FY = 35 KSI). ALL TUBULAR STEEL SHALL BE ASTM A500 (FY = 46 KSI).
2. ALL BOLTS AND STUDS SHALL BE ASTM A307, UNLESS NOTED OTHERWISE. ALL EXPANSION BOLTS TO HAVE CURRENT ICBO RATING FOR MATERIAL INTO WHICH INSTALLATION TAKES PLACE. HEADED STUDS SHALL CONFORM TO ALL REQUIREMENTS OF THE LATEST EDITION OF THE "RECOMMENDED PRACTICES FOR STUD WELDING" AND THE "STRUCTURAL WELDING CODE" PUBLISHED BY AWS. ALL BOLTS, ANCHOR BOLTS, EXPANSION BOLTS, ETC. SHALL BE INSTALLED WITH STEEL WASHERS AT FACE OF WOOD OR AT SLOTTED HOLES IN STEEL SECTIONS.
3. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, LATEST EDITION.
4. WELDING SHALL BE BY WELDERS HOLDING VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELD SHOWN ON THE DRAWINGS OR NOTES. ALL WELDING SHALL USE E70 SERIES LOW HYDROGEN RODS UNLESS NOTED OTHERWISE. ALL WELDING PER LATEST AMERICAN WELDING SOCIETY STANDARDS. ALL WELDS ON DRAWINGS ARE SHOWN AS SHOP WELDS. CONTRACTOR MAY SHOP WELD OR FIELD WELD AT HIS DISCRETION. ALL FULL PENETRATION WELDS SHALL BE TESTED AND CERTIFIED BY AN INDEPENDENT TESTING LABORATORY.
5. STEEL TO STEEL BOLTED CONNECTIONS: HIGH STRENGTH BOLTS SHALL BE ASTM A325N AND SHALL BE INSTALLED AS BEARING-TYPE CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANE (TYPE "N" CONNECTION). BOLTS MAY BE TIGHTENED USING ANY AISC APPROVED METHOD.
6. DRYPACK SHALL BE 5,000 PSI FIVE STAR NON-SHRINK GROUT OR EQUIVALENT. INSTALL DRYPACK UNDER BEARING PLATES BEFORE FRAMING MEMBER IS INSTALLED. AT COLUMNS, INSTALL DRYPACK UNDER BASE PLATES AFTER COLUMN HAS BEEN PLUMBED BUT PRIOR TO FLOOR OR ROOF INSTALLATION.

COLD FORMED STEEL (ICBO ER 4943P):

1. MATERIALS: STANDARD COLD-FORMED STEEL STUDS, JOISTS, TRACK, BRIDGING AND STRAPS SHALL CONFORM TO AISI NAS-01 WITH 2004 SUPPLEMENT (FY = 33 KSI). STEEL FOR PURLINS AND GIRTS SHALL CONFORM TO (FY = 55 KSI). STEEL SHALL BE GALVANIZED AT EXTERIOR WALLS AND FRAMING.
2. FRAMING SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE LATEST EDITION OF "SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" BY THE AMERICAN IRON AND STEEL INSTITUTE(AISI).
3. ALL STUDS SHALL BE SECURELY SEATED FOR FULL END BEARING ON TOP AND BOTTOM TRACK. UNLESS NOTED OTHERWISE, PROVIDE DOUBLE STUDS AT ALL JAMBS, CORNERS, INTERSECTIONS, BEAM BEARINGS AND JOIST BEARINGS.
4. ALL WELDING SHALL BE PERFORMED BY WELDERS EXPERIENCED IN LIGHT GAGE STRUCTURAL STEEL FRAMING WORK. MEMBERS SHALL HAVE THE FOLLOWING MINIMUM EFFECTIVE PROPERTIES PER STEEL STUD MANUFACTURERS ASSOCIATION(SSMA):

TYPE/STYLE	MEMBER	MLS(GA)	FY
3½"x18GA. STUD	362S162-43	43(18)	33KSI
3½"x18GA. TRACK	362T162-43	43(18)	33KSI
6"x18GA. STUD	600S162-43	43(18)	33KSI
6"x18GA. TRACK	600T162-43	43(18)	33KSI
8"x16GA. STUD	800S162-54	54(16)	50KSI
8"x16GA. TRACK	800T162-54	54(16)	50KSI

SPECIAL INSPECTION ITEMS:

1. THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR DURING CONSTRUCTION OF CERTAIN TYPES OF WORK. PER IBC SECTION 1704 AND THE STRUCTURAL ENGINEER OF RECORD, SPECIAL INSPECTION IS (IS NOT) REQUIRED AS FOLLOWS:

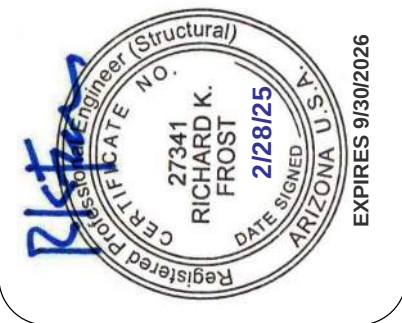
TYPE OF WORK:	REQUIRED:	REMARKS:
CONCRETE SLAB ON GRADE	NO	DESIGN BASED ON f'c=2500 PSI
ALL REINFORCED CONCRETE	YES	DURING PLACEMENT AND WHILE TAKING TEST SPECIMENS
REINFORCING STEEL FOR ALL CONCRETE/ MASONRY THAT REQUIRES INSPECTION	YES	PRIOR TO PLACEMENT OF CONCRETE OR GROUT
BOLTS, ANCHORS CAST IN CONCRETE	YES	DURING PLACEMENT OF CONCRETE
WELDING	YES	AFTER WORK IS COMPLETE
STEEL TO STEEL BOLTED CONNECTIONS	YES	AFTER WORK IS COMPLETE

SPECIAL INSPECTIONS NOT LISTED ABOVE ARE NOT REQUIRED BY FSE. HOWEVER, ADDITIONAL SPECIAL INSPECTIONS MAY BE REQUIRED BY THE BUILDING OFFICIAL.

2. DESIGNATION OF SPECIAL INSPECTOR: A SPECIAL INSPECTION CERTIFICATE - CORRESPONDING TO THE REQUIREMENTS IN THE TABLE ABOVE HAS BEEN PROVIDED WITH THESE DRAWINGS BY FSE FOR PERMITTING PURPOSES.
- A. ACCORDING TO THE SI CERTIFICATE, THE SPECIAL INSPECTOR SHALL BE, OR WORK UNDER THE DIRECT SUPERVISION OF THE STRUCTURAL ENGINEER OF RECORD - FROST STRUCTURAL ENGINEERING(FSE) (928)776-4757. FSE IS NOT RESPONSIBLE FOR SPECIAL INSPECTIONS IF WE ARE NOT CONTACTED OR CONTRACTED TO DO SO.
- B. TO SCHEDULE ANY SPECIAL INSPECTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE SPECIAL INSPECTOR AT LEAST ONE DAY IN ADVANCE.
- C. AN ALTERNATE SPECIAL INSPECTOR MAY BE USED BY OBTAINING A NEW SI CERTIFICATE, AND MAKE THE NECESSARY NOTIFICATIONS TO ALL PARTIES INVOLVED. THE ALTERNATE SPECIAL INSPECTOR SHALL BE AN ARIZONA LICENSED CIVIL OR STRUCTURAL ENGINEER OR AN ICC CERTIFIED SPECIAL INSPECTOR.
- D. FOR GEOTECHNICAL ITEMS LISTED ABOVE, THE SPECIAL INSPECTOR SHALL BE, OR WORK UNDER THE DIRECT SUPERVISION OF A GEOTECHNICAL ENGINEER OR THE BUILDING OFFICIAL.
3. QUALITY ASSURANCE PROGRAM:
- A. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN IT CONFORMS WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.
- B. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE STRUCTURAL ENGINEER OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. THEN, IF UNCORRECTED, TO THE DESIGN AUTHORITY AND THE BUILDING OFFICIAL.
- C. UPON COMPLETION OF THE ASSIGNED WORK THE STRUCTURAL ENGINEER SHALL COMPLETE AND SIGN THE APPROPRIATE FORMS CERTIFYING THAT TO THE BEST OF HIS KNOWLEDGE THE WORK IS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE INTERNATIONAL BUILDING CODE.

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812
F 928-443-5815

P.O. Box 11593
Prescott, AZ 86304

email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

GENERAL STRUCTURAL NOTES

DRAWING:

PROJECT:

APN:

DRAWN BY	IMC
CHECKED BY	AGK
DATE	2.13.2025
JOB NO.	2024-203
SHEET	

S1

DRAWING INDEX		
SHEET	DESCRIPTION	DETAILS
S1	GENERAL STRUCTURAL NOTES	---
S11	TYPICAL DETAILS	T--SERIES
S12	PLAN SCHEDULES	---
S2	FOUNDATION PLAN	---
S3	MEZZANINE FRAMING PLAN	---
S3.1	ROOF FRAMING PLAN	---
S3.2	ELEVATION PLANS	---
S3.3	ELEVATION PLANS	---
S4	FOUNDATION DETAILS	100--SERIES
S5	FRAMING DETAILS	200--SERIES
S5.1	MORE FRAMING DETAILS	200--SERIES

This drawing is the property of FROST Structural Engineering, Inc. Legally, the drawing can NOT be copied in whole or in pieces. It is only to be used for the project and site specifically identified hereon and is not to be used on any other project. Contractor shall carefully review all dimensions, details, and conditions and report at once any error, inconsistency or omission discovered before construction. The contractor assumes full liability for deviations from the intent of these plans.

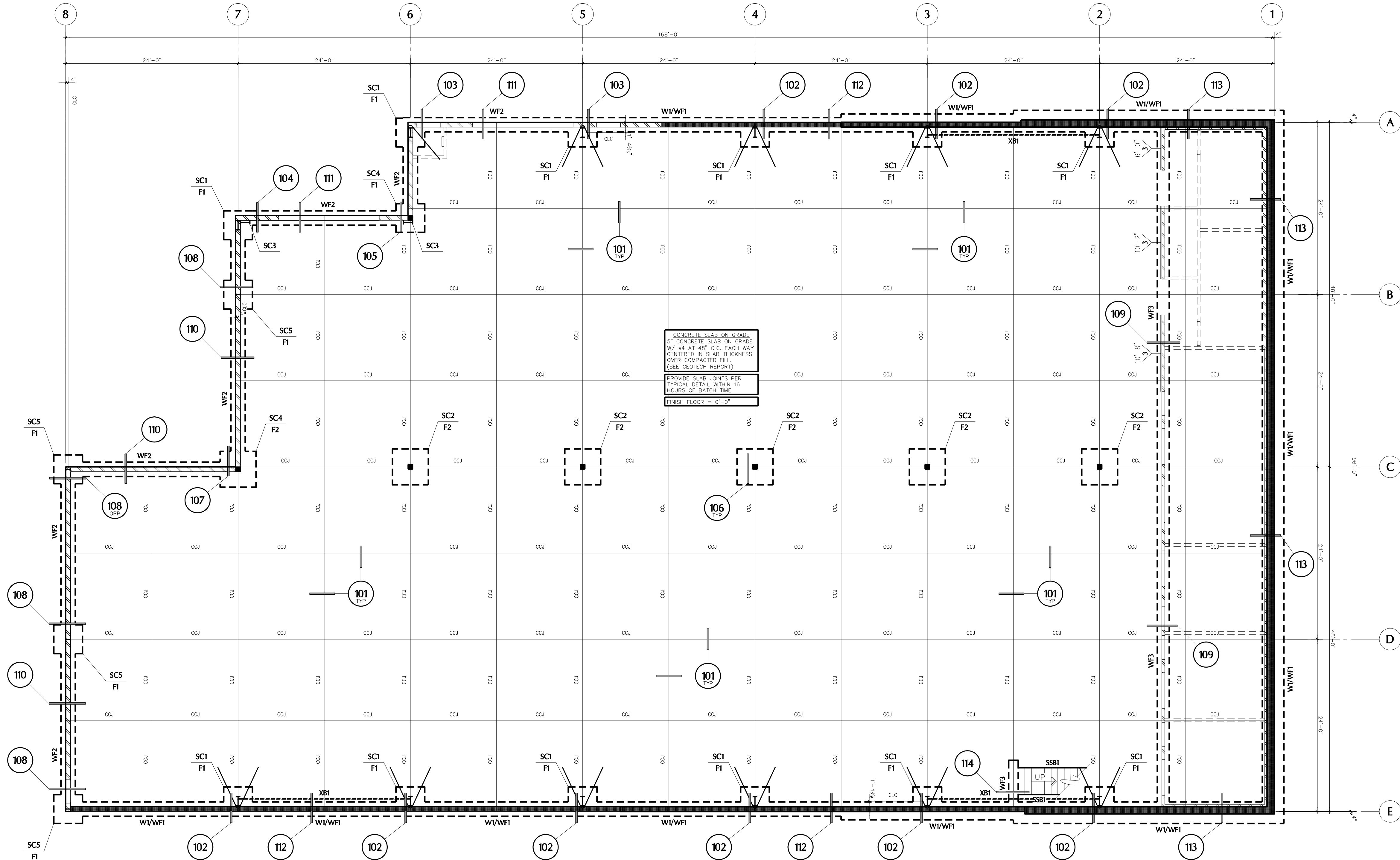
JOB NO.: 2024-203	PROJECT MANAGER: AGK	CAD OPERATOR: IMC
-------------------	----------------------	-------------------

FROST STRUCTURAL ENGINEERING

1678 Oaklawn Drive, Suite C
Prescott, Arizona 86305

phone: 928.776.4757
info@frost-structural.com
www.frost-structural.com

Feb 27, 2025 - 5:19pm



FOUNDATION PLAN

SCALE: 1/8" = 1'-0"

WALL SCHEDULE

--HATCHING INDICATES STRUCTURAL ELEMENT CONTINUES TO THE NEXT LEVEL (VERIFY WITH ARCHITECTURAL DRAWINGS).
--SEE PLAN SCHEDULES, DETAILS, AND GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.

4" STEEL STUD WALL STUDS:
3625162-43 MILS AT 16" O.C. (1) TRIMMER/(1) KING
STUD EACH JAMB U.N.O. BEAM/GORDER POSTS: DOUBLE
STUD (MIN. U.N.O.) SHEARWALL ENDPOSTS: DOUBLE STUD
(MIN. U.N.O.)

8" WALL 8" HORIZONTAL WIND GIRTS PER STRUCTURAL
ELEVATIONS.

8" CAST-IN-PLACE CONCRETE WALL MINIMUM
REINFORCING UNLESS NOTED OTHERWISE:
VERTICAL: #4 AT 12" O.C.
HORIZONTAL: #4 AT 12" O.C.

12" THICK CAST-IN-PLACE CONCRETE WALL MINIMUM
REINFORCING UNLESS NOTED OTHERWISE:
VERTICAL: #6 AT 10" O.C.
HORIZONTAL: #4 AT 12" O.C.

FOUNDATION PLAN NOTES

- VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL DRAWINGS.
- FOR LOCATION OF DETAILS SEE SHEET INDEX ON SHEET S1.
- ALL SCHEDULED MARK DESIGNATIONS MAY NOT NECESSARILY BE FOUND ON THIS PLAN. SCHEDULES ARE TYPICAL TO THIS PROJECT.
- THE DEPTH OF FOOTING DIMENSION INDICATED IN THE G.S.N. IS A MINIMUM. FOUNDATION CONTRACTOR SHALL COORDINATE WITH THE SOILS REPORT AND OTHER TRADES TO INSURE THAT THESE MINIMUMS ARE SUFFICIENT FOR THE WORK. SEE TYPICAL DETAILS FOR ADDITIONAL REQUIREMENTS.
- WF1, WF2, ETC. -- AS SHOWN ON PLAN INDICATES A CONTINUOUS WALL FOOTING. SEE WALL FOOTING SCHEDULE FOR ADDITIONAL INFORMATION.
- F1, F2, ETC. -- AS SHOWN ON PLAN INDICATES A CONCRETE FOOTING. SEE FOOTING SCHEDULE FOR ADDITIONAL INFORMATION.
- W1, W2, ETC. -- AS SHOWN ON PLAN INDICATES WALL REINFORCING. SEE WALL REINFORCING SCHEDULE FOR ADDITIONAL INFORMATION.
- SC1, SC2, ETC. -- AS SHOWN ON PLAN INDICATES A STEEL COLUMN. SEE STEEL COLUMN SCHEDULE FOR ADDITIONAL INFORMATION. COLUMNS START AT THE LEVEL THEY ARE CALLED OUT ON.
- CCJ -- AS SHOWN ON PLAN INDICATES LOCATION OF EITHER A KEYED OR A SAW CUT CONTROL JOINT IN THE SLAB ON GRADE AT CONTRACTOR'S OPTION. SEE GENERAL STRUCTURAL NOTES AND DETAIL 101.
- XB1, XB2, ETC. -- AS SHOWN ON PLAN INDICATES A X-BRACING. SEE X-BRACING SCHEDULE FOR ADDITIONAL INFORMATION.
- VERIFY EXACT SIZE AND LOCATION OF DEPRESSED AND/OR RAISED SLABS WITH ARCHITECTURAL DRAWINGS.
- FOR SIDEWALK AND LANDING LOCATIONS, SEE ARCHITECTURAL DRAWINGS.

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.



P.O. Box 11593
Prescott, AZ 86304
P 928-443-5812
F 928-443-5815
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: FOUNDATION PLAN

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY
IMC

CHECKED BY
AGK

DATE
2.13.2025

JOB NO.
2024-203

SHEET

S2

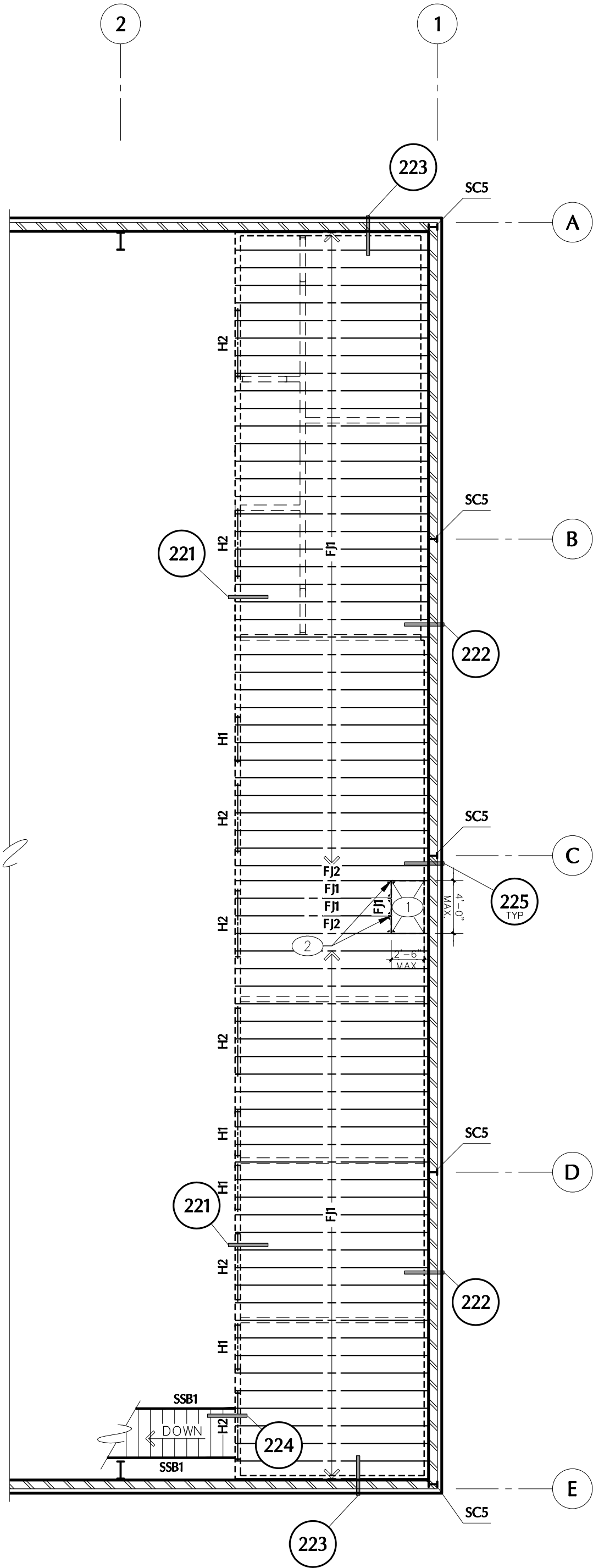
This drawing is the property of FROST Structural Engineering, Inc. Legally, the drawing can NOT be copied in whole or in pieces. It is only to be used for the project and site specifically identified hereon and is not to be used on any other project. Contractor shall carefully review all dimensions, details, and conditions and report at once any error, inconsistency or omission discovered before construction. The contractor assumes full liability for deviations from the intent of these plans.

JOB NO.: 2024-203 PROJECT MANAGER: AGK CAD OPERATOR: IMC

FROST STRUCTURAL ENGINEERING

1678 Oaklawn Drive, Suite C phone: 928.776.4757
Prescott, Arizona 86305 info@frost-structural.com
www.frost-structural.com

Feb 27, 2025 - 5:19pm



MEZZANINE FRAMING PLAN

SCALE: 1/8" = 1'-0"

WALL SCHEDULE	
--HATCHING INDICATES STRUCTURAL ELEMENT CONTINUES TO THE NEXT LEVEL (VERIFY WITH ARCHITECTURAL DRAWINGS). --SEE PLAN SCHEDULES, DETAILS, AND GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.	
	4" STEEL STUD WALL. STUDS: 362S162-43 MILS AT 16" O.C. (1) TRIMMER/(1) KING STUD EACH JAMB U.N.O. BEAM/ORDER POSTS: DOUBLE STUD (MIN. U.N.O.) SHEARWALL ENDPOSTS: DOUBLE STUD (MIN. U.N.O.)
	8" WALL. 8" HORIZONTAL WIND GIRTS PER STRUCTURAL ELEVATIONS.
	STRUCTURAL WALL BELOW (BEARING WALL, SHEARWALL, OR EXTERIOR WALL).
	NON-STRUCTURAL WALL BELOW.
FLOOR FRAMING PLAN NOTES	
1. VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL DRAWINGS. 2. FOR LOCATION OF DETAILS SEE SHEET INDEX ON SHEET S1. 3. ALL SCHEDULED MARK DESIGNATIONS MAY NOT NECESSARILY BE FOUND ON THIS PLAN. SCHEDULES ARE TYPICAL TO THIS PROJECT. 4. SC1, SC2, ETC. -- AS SHOWN ON PLAN INDICATES A STEEL COLUMN. SEE STEEL COLUMN SCHEDULE FOR ADDITIONAL INFORMATION. COLUMNS START AT THE LEVEL THEY ARE CALLED OUT ON. 5. FJ1, FJ2, ETC. -- AS SHOWN ON PLAN INDICATES FLOOR JOISTS. SEE FLOOR JOIST SCHEDULE FOR ADDITIONAL INFORMATION. 6. H1, H2, ETC. -- AS SHOWN ON PLAN INDICATES A HEADER. SEE HEADER SCHEDULE FOR ADDITIONAL INFORMATION. 7. FOR CLARITY, DETAILS MAY SHOW ONLY ONE SIDE OF FRAMING CONDITION.	

PLAN KEYNOTES	
	FIELD LOCATE OPENING FOR HVAC DOWNDRAFT.
	SIMPSON S/LBV HANGERS - TYPICAL.

This drawing is the property of FROST Structural Engineering, Inc. Legally, the drawing can NOT be copied in whole or in pieces. It is only to be used for the project and site specifically identified hereon and is not to be used on any other project. Contractor shall carefully review all dimensions, details, and conditions and report at once any error, inconsistency or omission discovered before construction. The contractor assumes full liability for deviations from the intent of these plans.

JOB NO.: 2024-203	PROJECT MANAGER: AGK	CAD OPERATOR: IMC
-------------------	----------------------	-------------------

FROST STRUCTURAL ENGINEERING
1678 Oaklawn Drive, Suite C phone: 928.776.4757
Prescott, Arizona 86305 info@frost-structural.com
www.frost-structural.com

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

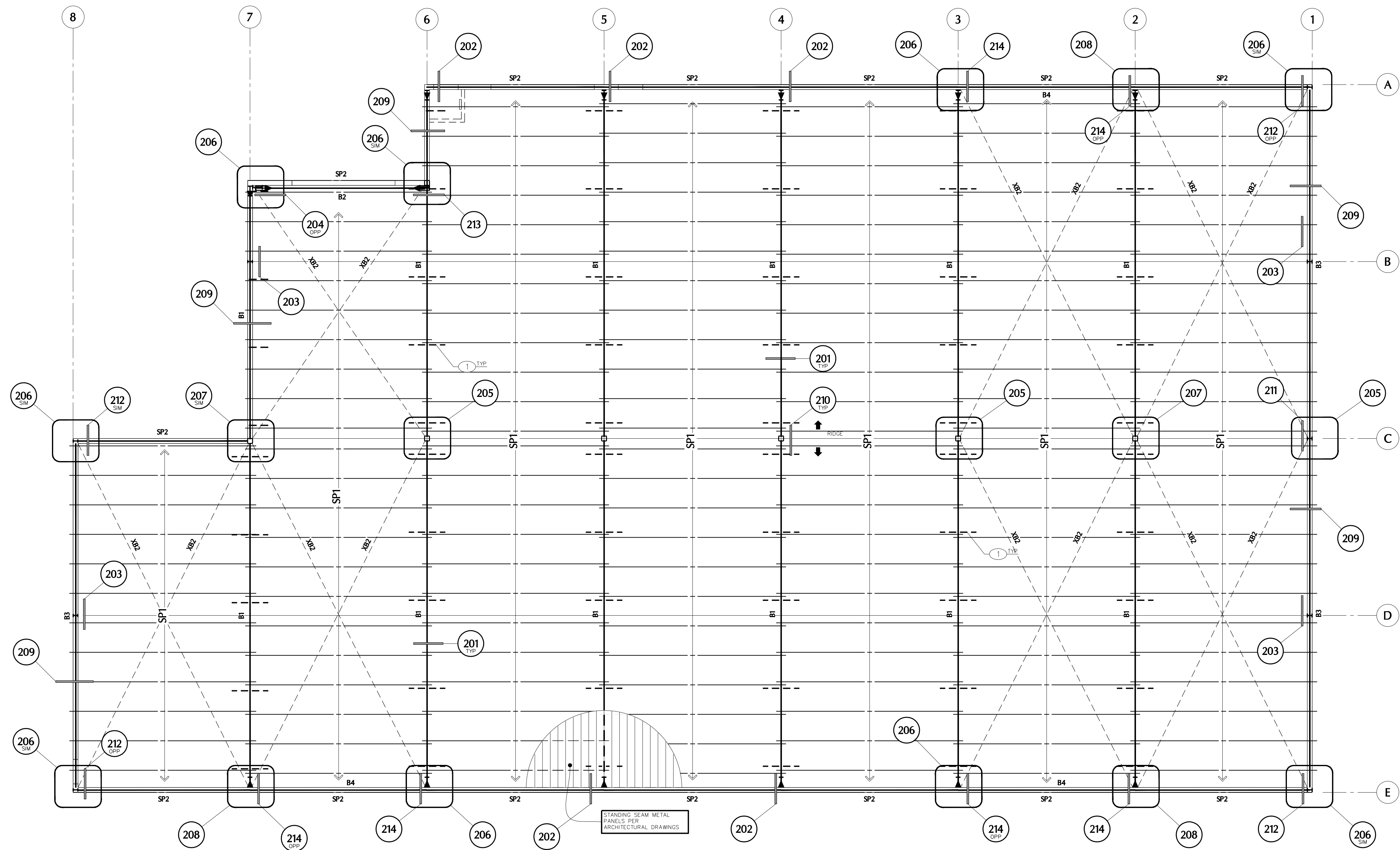
DRAWING: MEZZANINE FRAMING PLAN

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

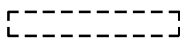
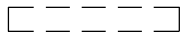
DRAWN BY IMC
CHECKED BY AGK
DATE 2.13.2025
JOB NO. 2024-203
SHEET

S3



ROOF FRAMING PLAN

SCALE: $1/8" = 1'-0"$

WALL SCHEDULE	
NOTE:	SEE PLAN SCHEDULES, DETAILS AND GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.
AS SEEN ON PLANS	INDICATES-
	STRUCTURAL WALL BELOW (BEARING WALL, SHEARWALL, OR EXTERIOR WALL).
	NON-STRUCTURAL WALL BELOW.
ROOF FRAMING PLAN NOTES	
1.	VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL DRAWINGS.
2.	FOR LOCATION AND DETAILS SEE SHEET INDEX ON SHEET S1.
3.	ALL SCHEDULED MARK DESIGNATIONS MAY NOT NECESSARILY BE FOUND ON THIS PLAN. SCHEDULES ARE TYPICAL TO THIS PROJECT.
4.	B1, B2, ETC. – AS SHOWN ON PLAN INDICATES A BEAM. SEE BEAM SCHEDULE FOR ADDITIONAL INFORMATION.
5.	SP1, SP2, ETC. – AS SHOWN ON PLAN INDICATES A STEEL PURLIN. SEE STEEL PURLIN SCHEDULE FOR ADDITIONAL INFORMATION.
6.	XB1, XB2, ETC. – AS SHOWN ON PLAN INDICATES A X-BRACE. SEE X-BRACE SCHEDULE FOR ADDITIONAL INFORMATION.
7.	FOR CLARITY, DETAILS MAY SHOW ONLY ONE SIDE OF FRAMING CONDITION.
PLAN KEYNOTES	
①	LOCATION OF STEEL ANGLE BRACES. SEE DETAIL 201.

This drawing is the property of FROST Structural Engineering, Inc. Legally, the drawing can NOT be copied in whole or in pieces. It is only to be used for the project and site specifically identified herein and is not to be used on any other project. Contractor shall carefully review all dimensions, details, and conditions and report at once any error, inconsistency or omission discovered before construction. The contractor assumes full liability for deviations from the intent of these plans.

FROST STRUCTURAL ENGINEERING
1678 Oaklawn Drive, Suite C phone: 928.776.4757
Prescott, Arizona 86305 info@frost-structural.com
www.frost-structural.com

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.



P 928-443-5812 **P.O. Box 11593**
F 928-443-5815 **Prescott, AZ 86304**
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING
WWW.KELSOFF-ASSOCIATES.COM

DRAWING: ROOF FRAMING PLAN

PROJECT: European Techniques 7
6686 Inter Cal Way

APN: 103-50-019

DRAWN BY

IMC

CHECKED B

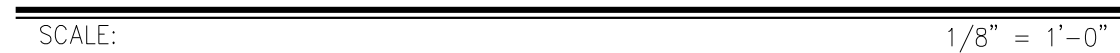
AGK

DATE _____

2.13.2025

JOB NO.
2024-203

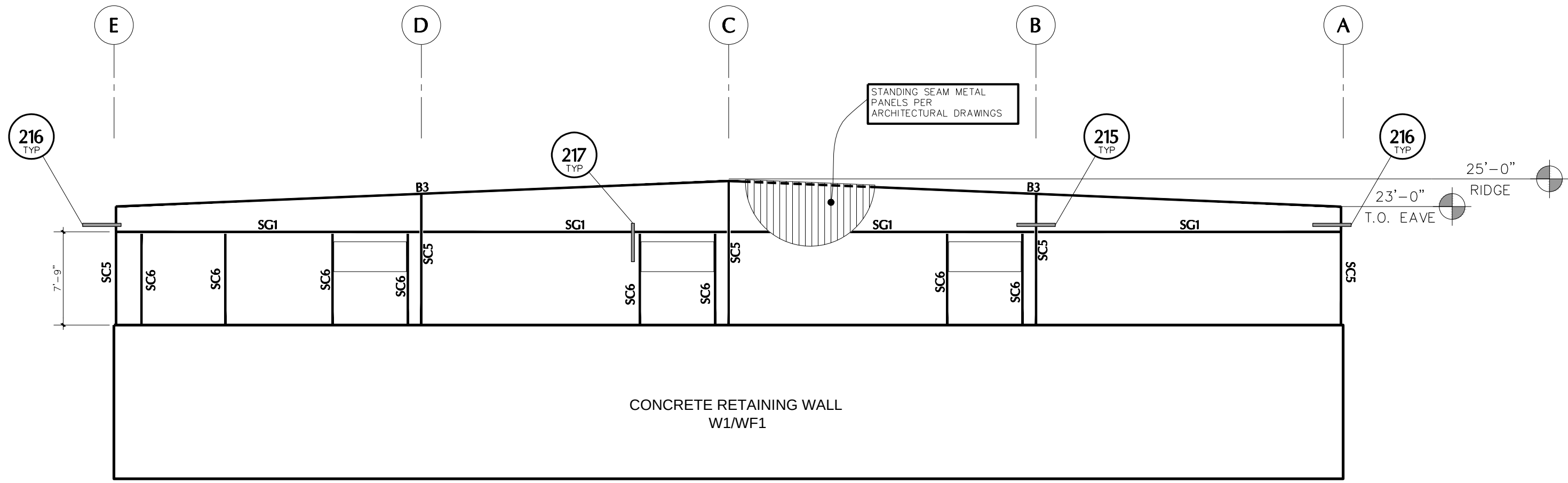
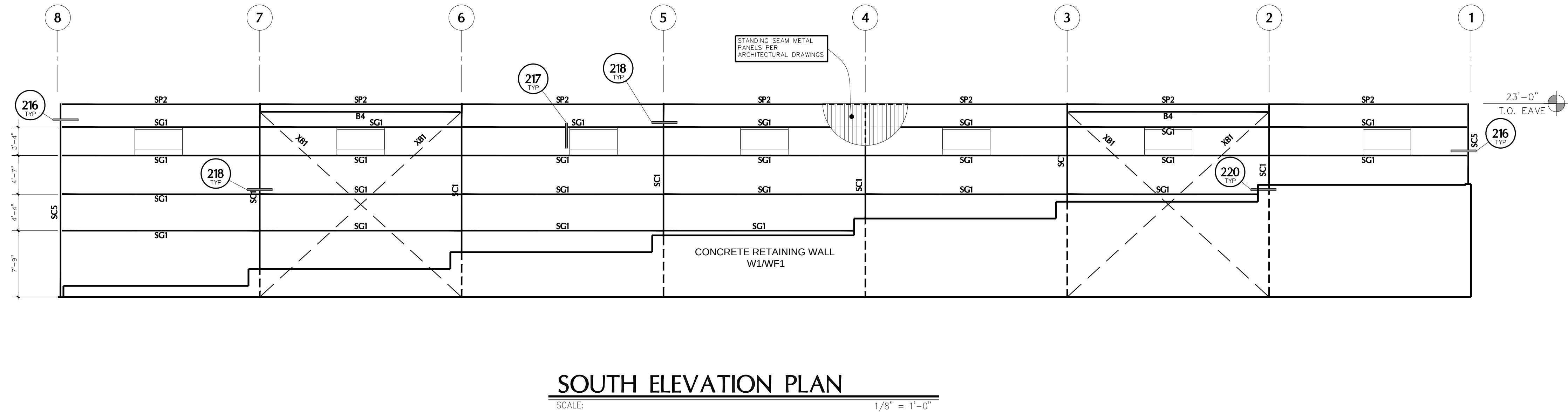
S3.1



FROST STRUCTURAL ENGINEERING
1678 Oaklawn Drive, Suite C phone: 928.776.4757
Prescott, Arizona 86305 info@frost-structural.com
www.frost-structural.com

S3.2

Feb 27, 2025 - 5:19pm



This drawing is the property of FROST Structural Engineering, Inc. Legally, the drawing can NOT be copied in whole or in pieces. It is only to be used for the project and site specifically identified hereon and is not to be used on any other project. Contractor shall carefully review all dimensions, details, and conditions and report at once any error, inconsistency or omission discovered before construction. The contractor assumes full liability for deviations from the intent of these plans.

JOB NO.: 2024-203	PROJECT MANAGER: AGK	CAD OPERATOR: IMC
-------------------	----------------------	-------------------

FROST STRUCTURAL ENGINEERING
1678 Oaklawn Drive, Suite C phone: 928.776.4757
Prescott, Arizona 86305 info@frost-structural.com
www.frost-structural.com

DRAWN BY	IMC
CHECKED BY	AGK
DATE	2.13.2025
JOB NO.	2024-203
SHEET	

DRAWING: ELEVATION PLANS

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

W. Alan Kenson & Associates, P.C.

P 928-443-5812 P.O. Box 11593
F 928-443-5815 Prescott, AZ 86304
email: wakaarchitect@gmail.com
www.kenson-associates.com

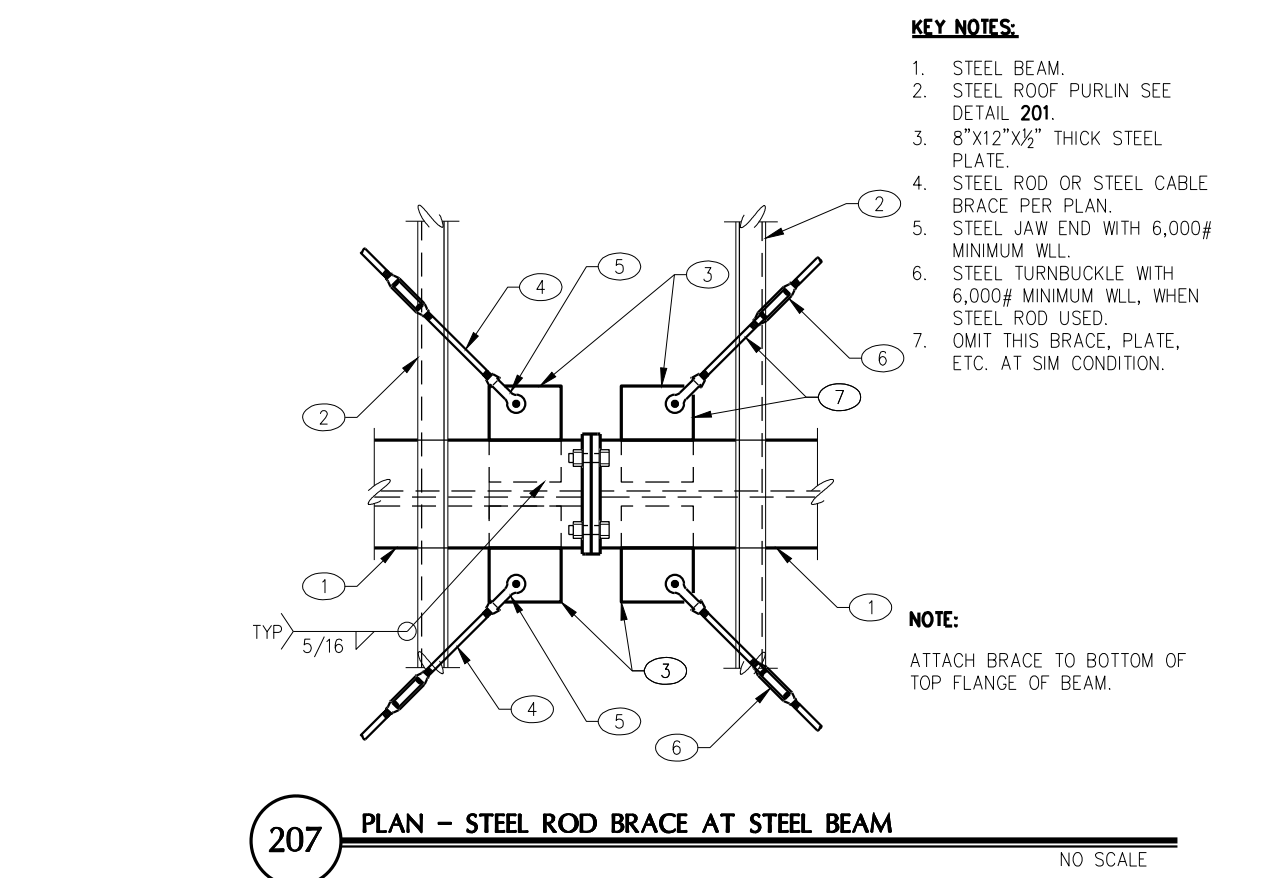
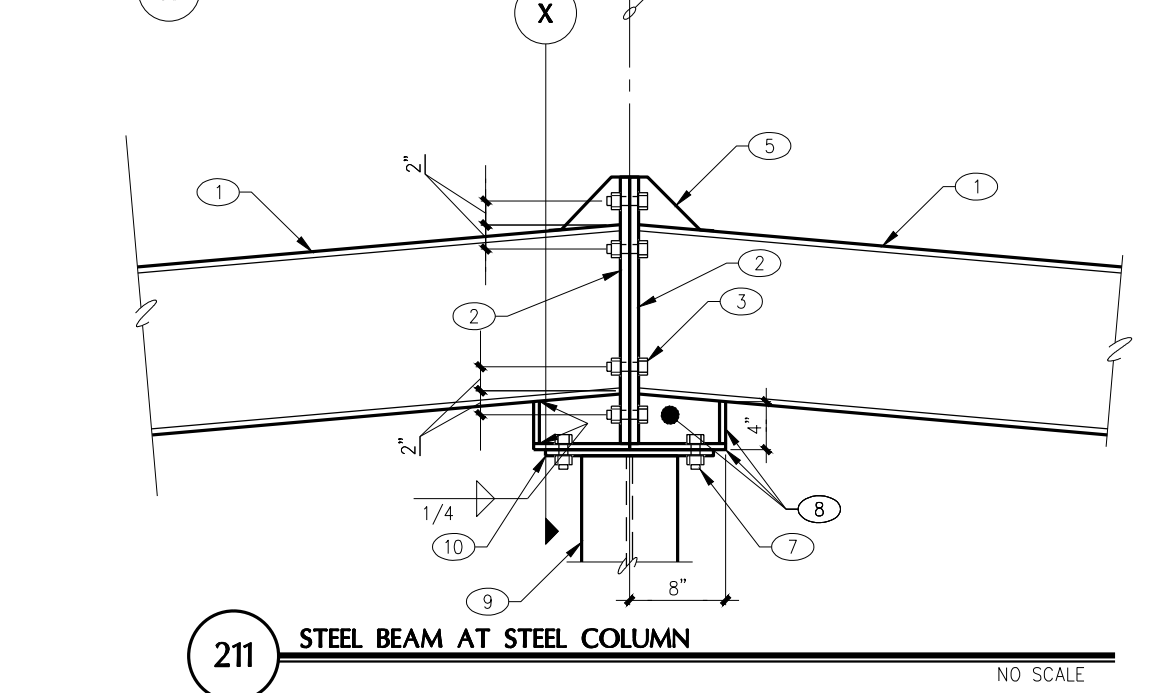
ARCHITECTURE & PLANNING



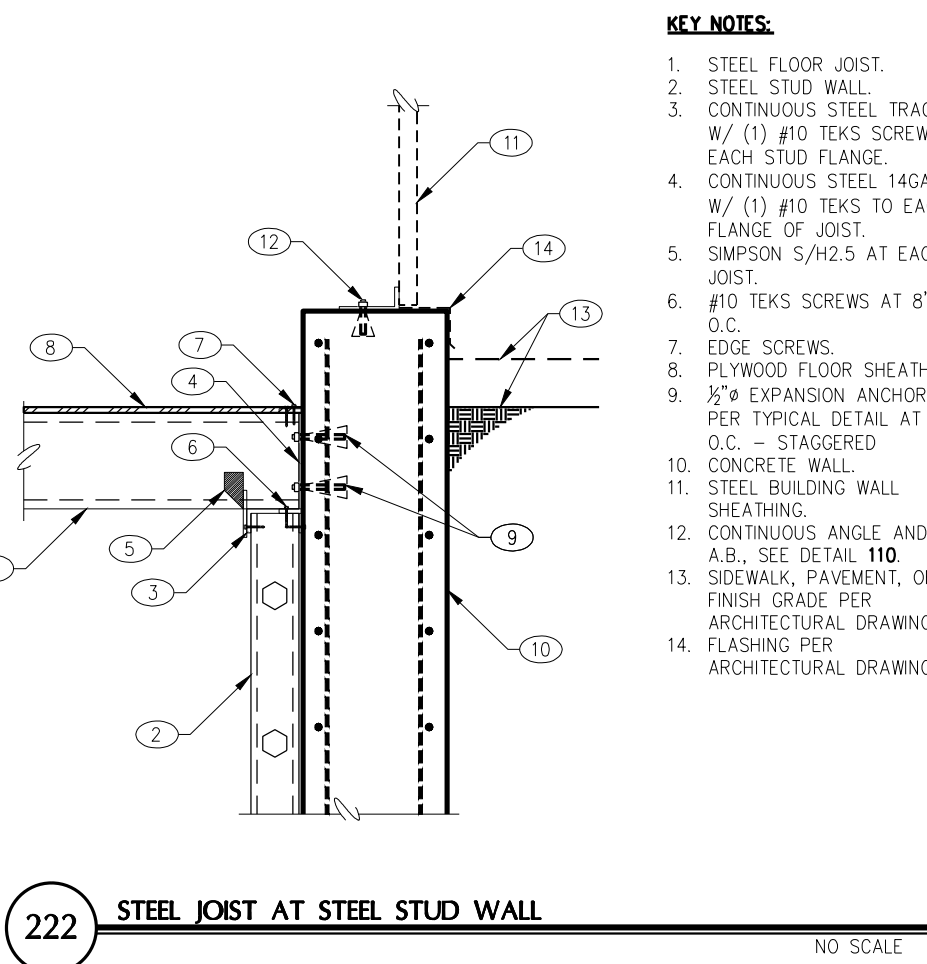
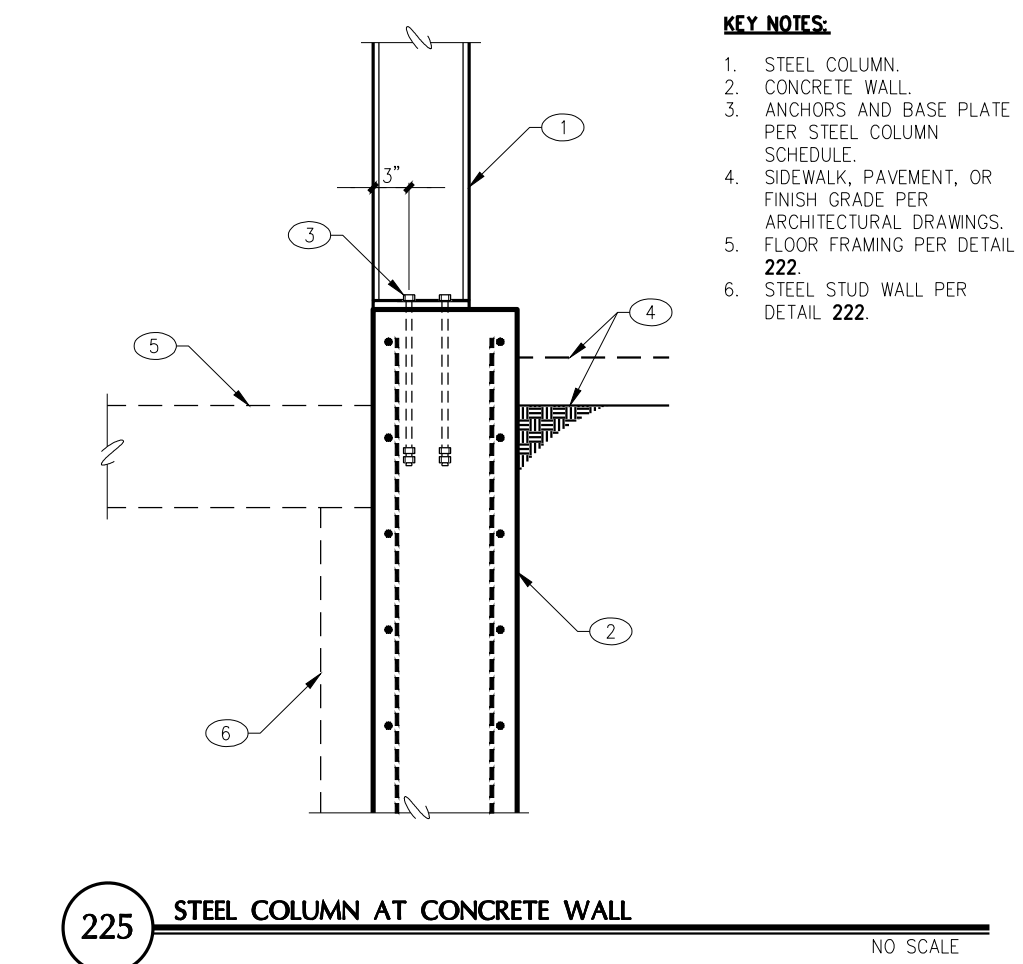
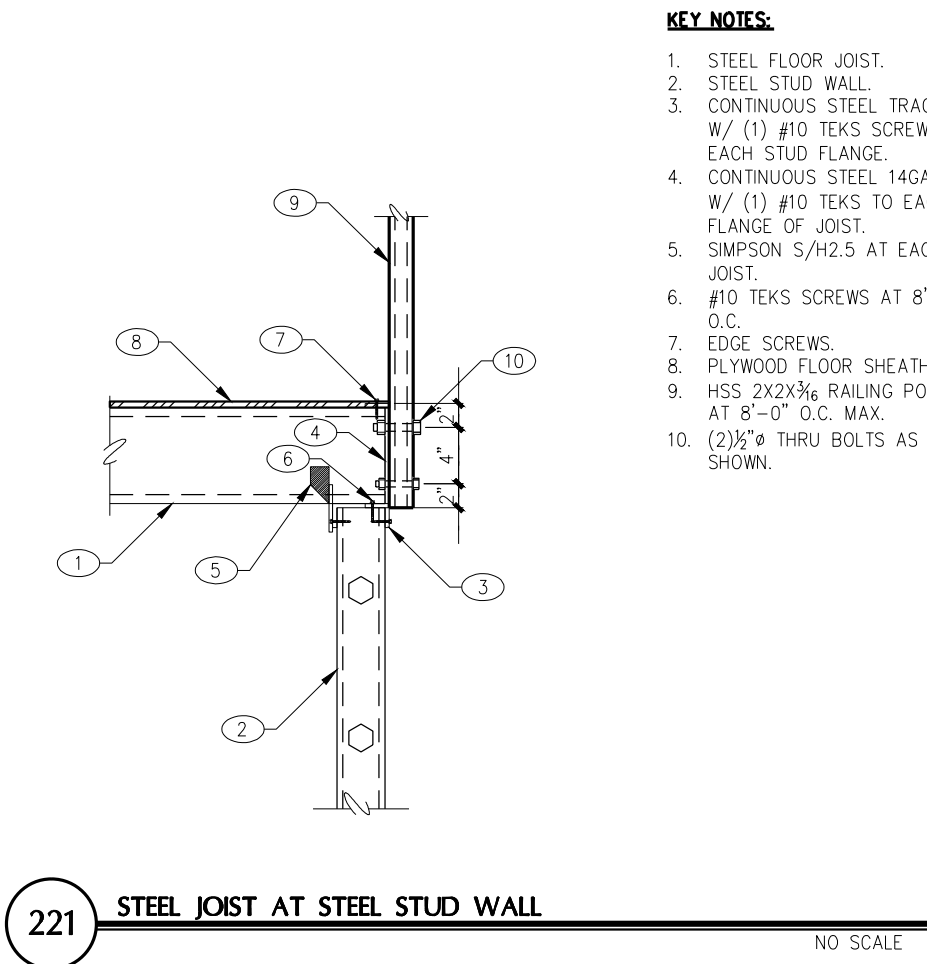
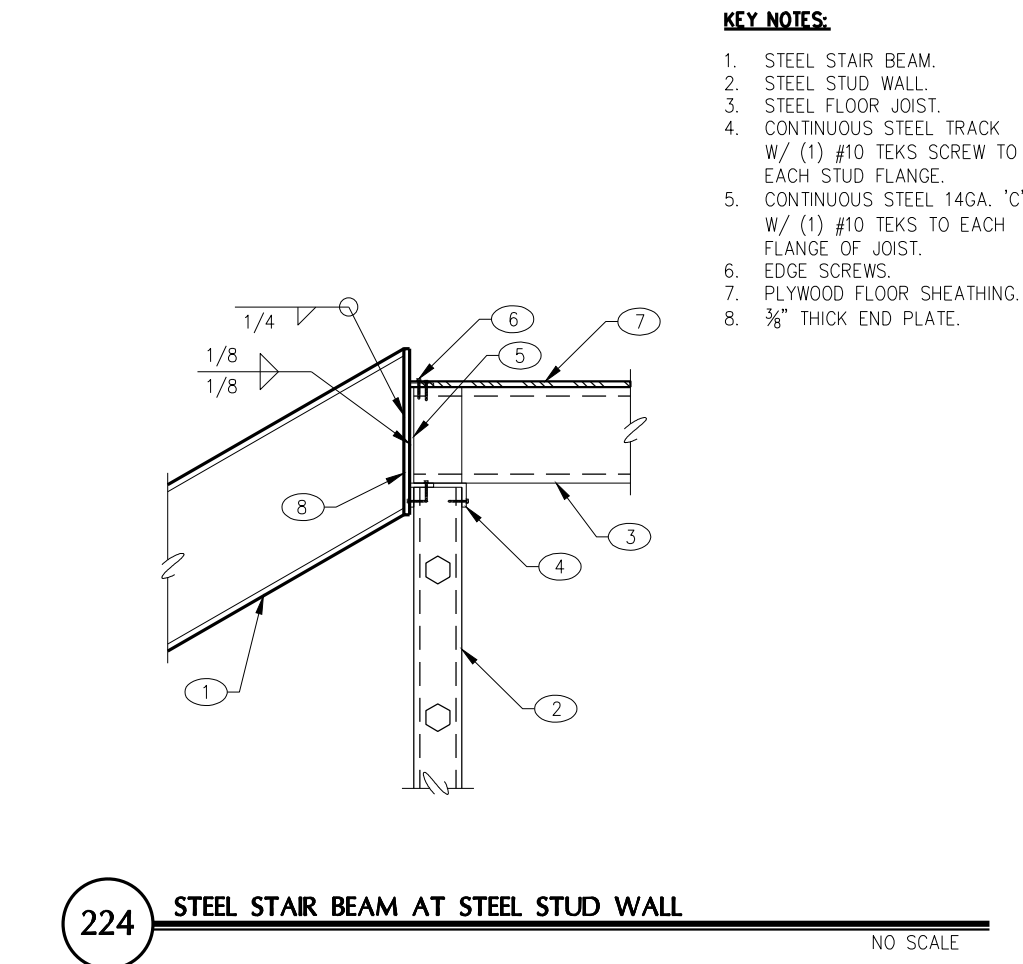
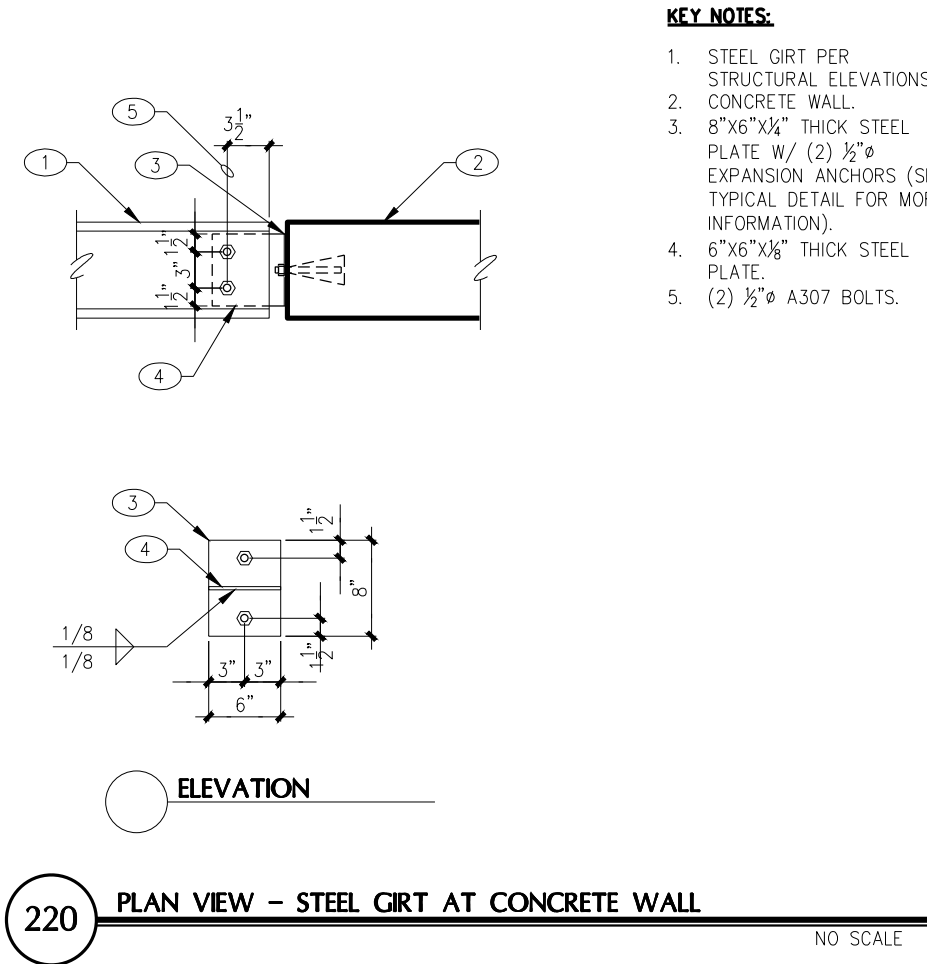
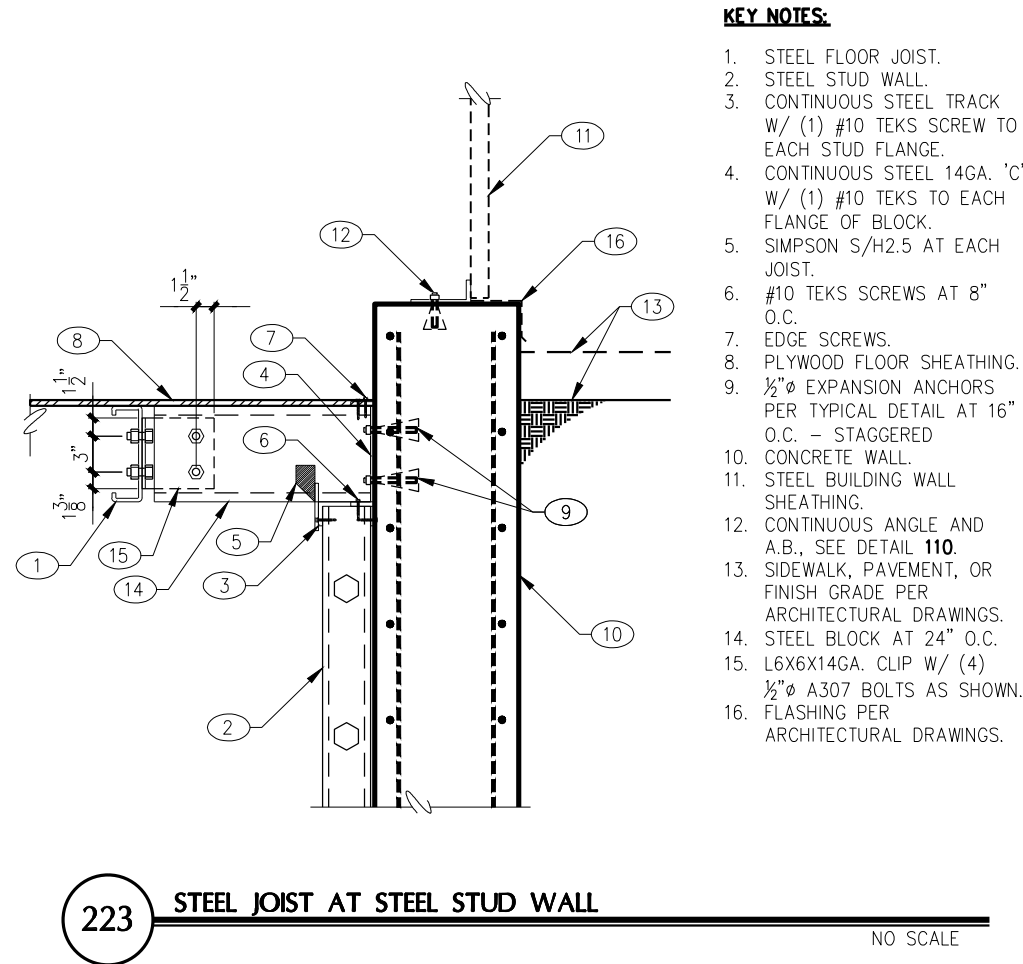
REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.





S5



This drawing is the property of FROST Structural Engineering, Inc. Legally, the drawing can NOT be copied in whole or in pieces. It is only to be used for the project and site specifically identified hereon and is not to be used on any other project. Contractor shall carefully review all dimensions, details, and conditions and report at once any error, inconsistency or omission discovered before construction. The contractor assumes full liability for deviations from the intent of these plans.

JOB NO.: 2024-203 PROJECT MANAGER: AGK CAD OPERATOR: IMC

FROST STRUCTURAL ENGINEERING
1678 Oaklawn Drive, Suite C phone: 928.776.4757
Prescott, Arizona 86305 info@frost-structural.com
www.frost-structural.com

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812
F 928-443-5815

P.O. Box 11593
Prescott, AZ 86304

email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: MORE FRAMING DETAILS 200-SERIES

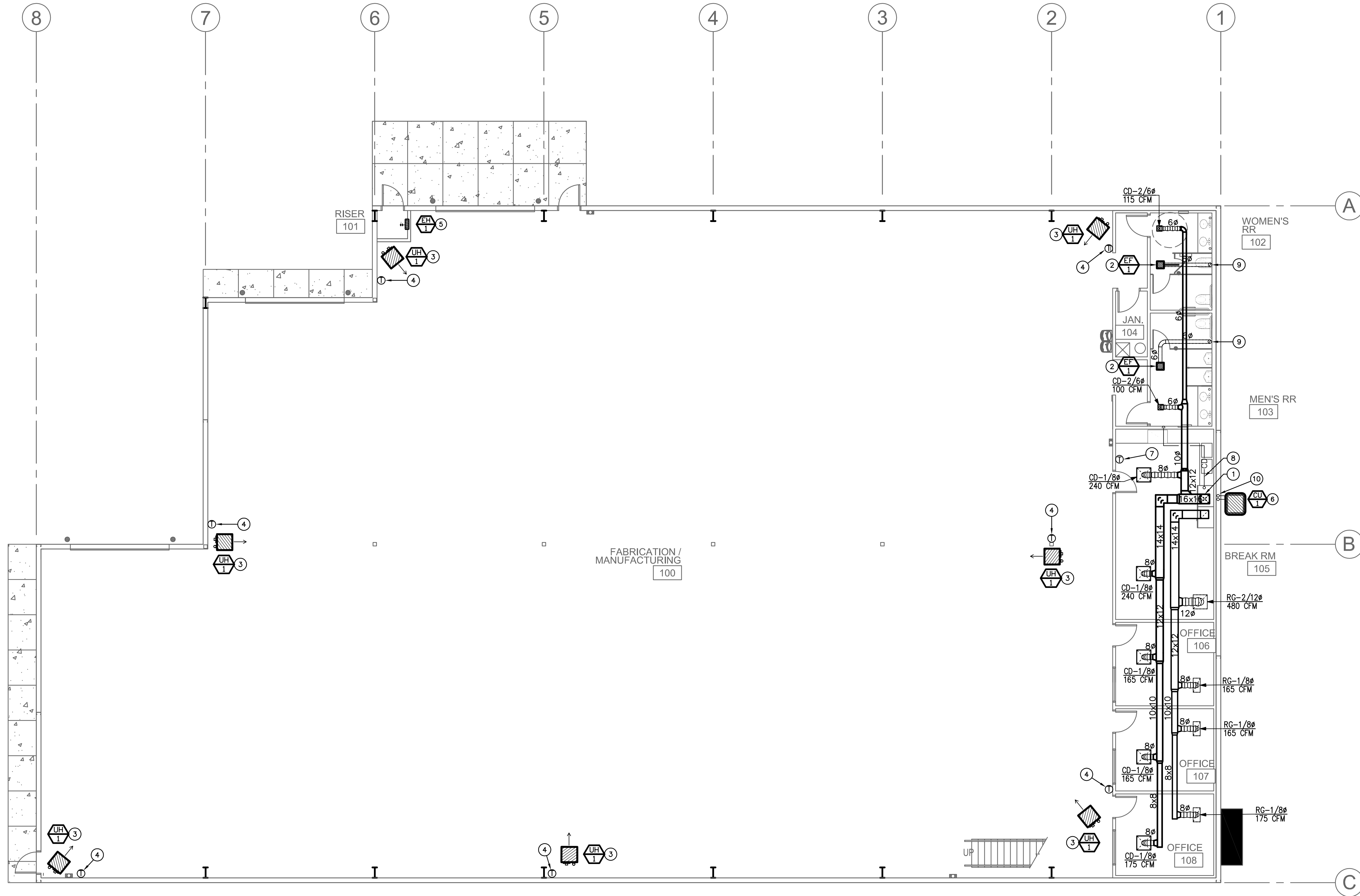
PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY IMC
CHECKED BY AGK
DATE 2.13.2025
JOB NO. 2024-203
SHEET

S5.1

Nov 25, 2024 - 3:06pm



M1 Mechanical Plan
Scale: 1/8"=1'-0" Plan North

KEYNOTES

- SUPPLY AND RETURN DUCT DOWN FROM ABOVE AND ROUTED ABOVE CEILING AS INDICATED.
- CEILING MOUNTED EXHAUST FAN WITH BACKDRAFT DAMPER. TRANSITION EXHAUST DUCT FROM UNIT DISCHARGE AND ROUTE TO MANUFACTURER'S ROOF DISCHARGE CAP. MAINTAIN A MINIMUM 10' CLEARANCE FROM ALL OUTSIDE AIR INTAKES.
- GAS-FIRED UNIT HEATER SUPPORTED FROM STRUCTURE, WITH TYPE "B" FLUE UP THROUGH ROOF. COORDINATE UNIT HEATER MOUNTING HEIGHT, BUT SHALL A MINIMUM OF 15' A.F.F. (1 FOOT ABOVE DOOR HEAD HEIGHT).
- PROVIDE UNIT HEATER WITH LOW VOLTAGE THERMOSTAT WITH INSULATED SUB-BASE.
- SURFACE MOUNT, ELECTRIC WALL HEATER WITH INTEGRAL THERMOSTAT.
- OUTDOOR CONDENSING UNIT ON PRE-FABRICATED SLAB, REFER TO ARCHITECTURAL PLANS. MOUNT DISCONNECTS BETWEEN UNITS ON WALL TO MAINTAIN REQUIRED CLEARANCES.
- PROVIDE HEATING/COOING PROGRAMMABLE THERMOSTAT ON WALL AT 48" ABOVE FINISHED FLOOR. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECT/OWNER. PROVIDE WITH LOCKING COVER.
- 3/4" CONDENSATE DRAIN DOWN FROM ABOVE AND ROUTED TO SINK TAILPIECE.
- EXHAUST DUCT UP INTO MEZZANINE SEE SHEET M1.2 FOR CONTINUATION.
- SLEEVE REFRIGERANT PIPING THROUGH WALL AND ROUTE IN STRUCTURE TO INDOOR FURNACE COIL. SIZE, INSULATE AND INSTALL PIPING PER MANUFACTURER'S RECOMMENDATIONS. FOLLOW MANUFACTURER'S PIPING GUIDE FOR ANY PIPING LENGTHS OVER 50 FEET. INSULATE REFRIGERANT PIPING PER SPECIFICATIONS.

WAREHOUSE COMBUSTION AIR CALC	
WAREHOUSE VOLUME	
5160 FT. SQ. X 17 FT. = 87,720 CU. FT.	
TOTAL GAS MBH	
(2) UH-1 = 60 MBH x 2 = 120 MBH (120,000 BTU/H)	
VOLUME PER MBH	
57,720 CU. FT. / 120 MBH = 481 FT. CU./MBH	
VOLUME PER MBH IS MORE THAN 50 FT. CU./MBH	
COMBUSTION AIR DELIVERED VIA INFILTRATION	

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C. and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.
P.O. Box 11593
Prescott, AZ 86304
P 928-443-5812
F 928-443-5815
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Mechanical Floor Plan

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY
CHECKED BY
DATE November 12th, 2024
JOB NO. 803
SHEET

M1.1

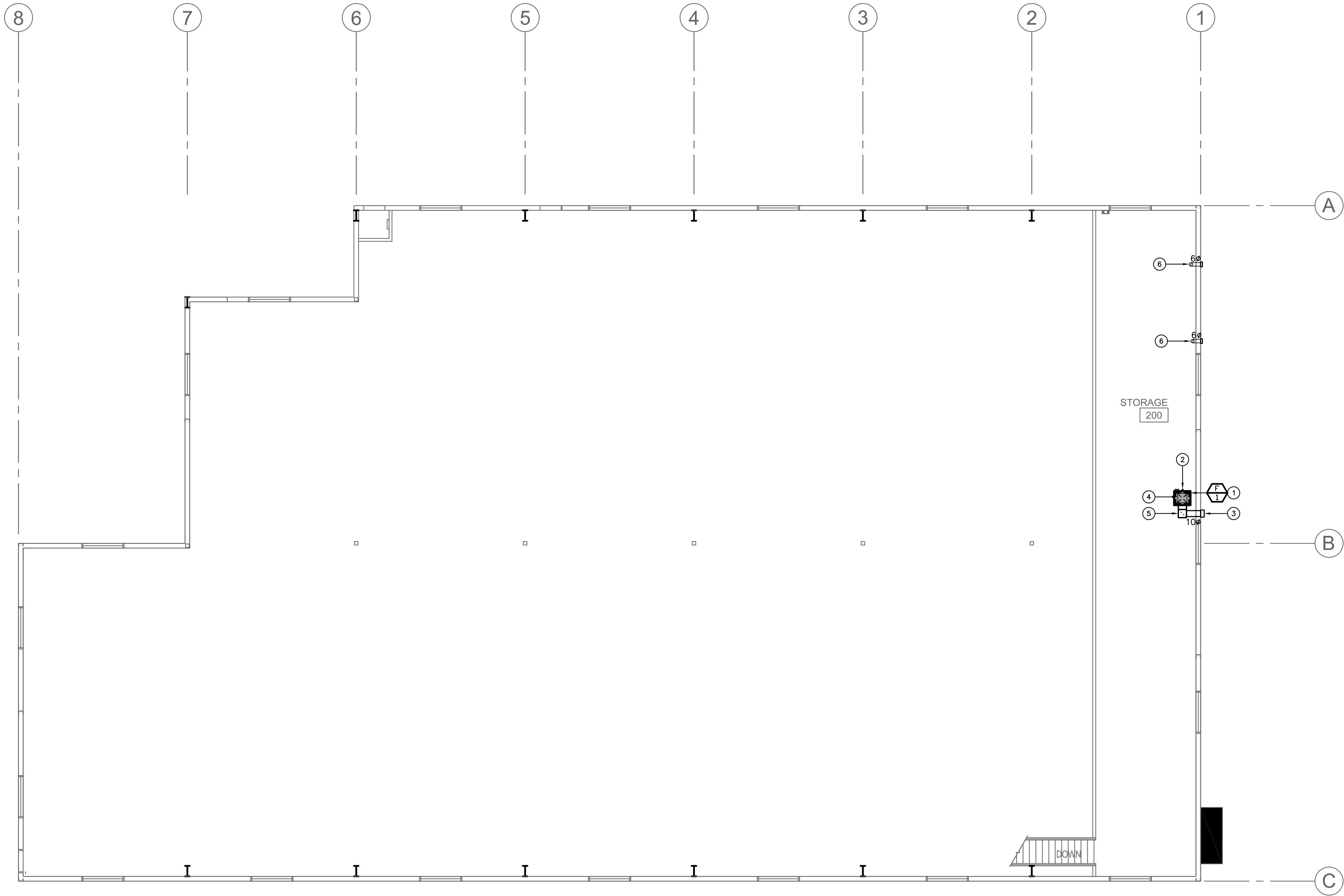


611 West Delano Ave
Prescott, AZ 86301
(602) 499-0001

Project #24075

10922 N. 153rd Ln.
Surprise, AZ 85379
(623) 444-6143

Nov 25, 2024 - 3:06pm



Mechanical Mezzanine Plan

Scale: 1/8"=1'-0" Plan
North



KEYNOTES

- 1 NEW VERTICAL DOWNFLOW SEALED COMBUSTION FURNACE ON DOWN-FLOW SUB-BASE. MAINTAIN ALL NECESSARY CLEARANCES AND MAINTENANCE ACCESS REQUIREMENTS. ROUTE AND CONNECT REFRIGERANT LINES FROM CONDENSING UNIT. ROUTE PVC COMBUSTION AIR INTAKE AND VENT PIPING TO CONCENTRIC ROOF OR WALL TERMINATION PER MANUFACTURER. INSTALLATION SHALL BE IN ACCORDANCE TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR THE INSTALLED LENGTH AND FITTINGS.
- 2 3/4" CONDENSATE DRAIN DOWN THROUGH MEZZANINE FLOOR AND TO SINK TAILPIECE.
- 3 EXTEND 10" OUTSIDE AIR DUCT (WITH BALANCE DAMPER) FROM RETURN DUCT TO WALL INTAKE HOOD. INTAKE TO BE FAMCO #SWV10A.
- 4 16x16 SUPPLY DUCT DOWN THROUGH MEZZANINE FLOOR INTO CEILING SPACE.
- 5 14x14 RETURN DUCT DOWN THROUGH MEZZANINE FLOOR INTO CEILING SPACE.
- 6 EXHAUST DUCT UP THROUGH MEZZANINE FLOOR FROM BELOW AND TO RISE UP AND ROUTE TO EXHAUST WALL DISCHARGE CAP AT MINIMUM 18" ABOVE GRADE.



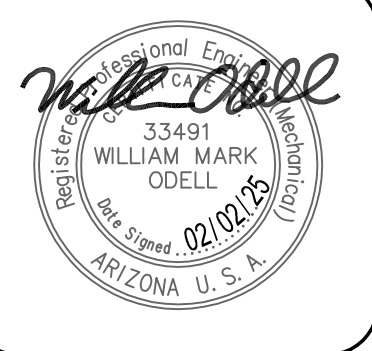
611 West Delano Ave
Prescott, AZ 86301
(602) 499-0001

Project
#24075

10922 N. 153rd Ln.
Surprise, AZ 85379
(623) 444-6143

REVISIONS	BY

These drawings are the property of
W. Alan Kenson & Associates P.C.,
and may not be reproduced in any
way without the written consent of
W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.



P.O. Box 11593
Prescott, AZ 86304
P 928-443-5812
F 928-443-5815
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Mechanical Mezzanine Floor Plan

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY

CHECKED BY

DATE
November 12th, 2024

JOB NO.
803

SHEET

M1.2

FURNACE SCHEDULE																	
MARK	NOMINAL TONS	MFG'R	MODEL #	CFM	OSA	E.S.P. ("W.G.)	HEATING CAP. HIGH FIRE		VENT SIZING	FUEL	A.F.U.E.	ELECTRICAL DATA		FILTER SIZE	FILTER TYPE	WEIGHT LBS	NOTES
							INPUT	OUTPUT				H.P.	V/Ø/Hz				
F-1	3	TRANE	S9X2B060	1200	1200	0.50	48,000	46,080	2"	N. GAS	96%	3/4	120/1/60	16x25x1	HIGH VELOCITY	122	①②③④⑤
① INSTALL WITH CLEARANCES PER MANUFACTURER'S RECOMMENDATIONS.																	
② SIZE AND INSTALL 2 PIPE VENT PIPING PER MANUFACTURER'S INSTRUCTIONS FOR ACTUAL INSTALLED LENGTHS. PROVIDE CONCENTRIC ROOF TERMINATION AND MAINTAIN MINIMUM 12" CLEARANCE ABOVE ANTICIPATED SNOW LEVEL.																	
③ UNIT SHALL BE CONFIGURED FOR DOWN DRAFT, PROVIDE SUB-BASE.																	
④ PROVIDE LEFT OR RIGHT CONNECTIONS AS REQUIRED FOR ACCESS IN MECHANICAL ROOMS.																	
⑤ INPUT RATINGS SHOWN HAVE BEEN DERATED FOR 5,000 FT ELEVATION. INPUT RATE CHANGES FROM STANDARD CAN BE MADE BY ADJUSTING MANIFOLD PRESSURE (MIN 3.0 – MAX 3.7) OR BY CHANGING ORIFICE.																	

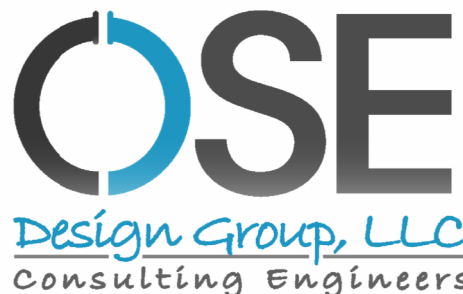
CONDENSING UNIT SCHEDULE														
MARK	NOMINAL TONS	MFG'R	MODEL #	Cooling Capacity		DESIGN COND. DB/WB	INDOOR COIL MODEL #	COIL ENT. AIR DB/WB	ELECTRICAL DATA			MINIMUM SEER	REFRIGERANT	NOTES
				TOTAL	SENS.				MCA	FUSE	V / Ø			
U-1	3	TRANE	4TTX6036	31.2	24.5	115/63	SELECTED BY MFG.	78°/63°	18	30	208/230 1Ø	16	R-410A	①②③④⑤⑥
① INSTALL UNIT PER MANUFACTURER'S WRITTEN DIRECTIONS. SLEEVE PIPING PENETRATIONS THROUGH EXTERIOR WALL, SEAL WATERTIGHT AND PROVIDE ESCUTCHEONS.														
② UNIT SHALL BE PROVIDED WITH PROGRAMMABLE THERMOSTATS.														
③ PROVIDE 10-YEAR COMPRESSOR WARRANTY AND 5-YEAR FOR OTHER COMPONENTS.														
④ PROVIDE UNIT COMPLETE WITH ALL NECESSARY DISCONNECTS, OVERLOADS AND CONTROL COMPONENTS.														
⑤ SIZE AND INSTALL ALL REFRIGERANT PIPING PER MFG'RS. INSTRUCTIONS.														
⑥ PROVIDE LOW AMBIENT CONTROL KIT FOR OPERATION DOWN TO 30°F.														
⑦ CAPACITIES SHOWN ARE AT JOBSITE ELEVATION OF 5000 FT.														

UNIT HEATER SCHEDULE														
EQUIP. NO.	MANUFACTURER	MODEL NO.	BLOWER			MOTOR		HEATER				FLUE (DIA.)	WT. (LBS)	REMARKS
			CFM	ESP	MIN. THROW	HP	VOLTS/ PHASE	FUEL	EFF.	MAX. INPUT MBH	MIN. OUTPUT MBH			
1	REZNOR	UDX-75	961	0	x	0.06	120/1	NAT. GAS	83%	60,000	49,800	4" RD	76	① ② ③ ④
① PROVIDE UNIT HEATER WITH LOW VOLTAGE THERMOSTAT WITH INSULATED SUB-BASE, W/ LOCKING COVER.														
② PROVIDE UNIT WITH ELECTRONIC SPARK IGNITION.														
③ PROVIDE UNIT WITH 2-POINT SUSPENSION KIT.														
④ INPUT RATINGS SHOWN HAVE BEEN DERATED FOR 5,000 FT ELEVATION. INPUT RATE CHANGES FROM STANDARD CAN BE MADE BY ADJUSTING MANIFOLD PRESSURE (MIN 3.0 – MAX 3.7) OR BY CHANGING ORIFICE.														

EXHAUST FAN SCHEDULE												
MARK	SERVES	MANUF.	MODEL	CFM	E.S.P. (in. wg)	ELEC			DRIVE	SONES	WEIGHT LBS	REMARKS
						AMPS	HEAT	V/PH				
1	RESTROOM	BROAN	BHF80	75	.175	12	1300 W	120/1	DIRECT	1.5	12	①②
① UNIT TO OPERATE VIA WALL SWITCH WITH SEPERATE FAN & HEATER CONTROL.. ② PROVIDE #JV6 FAMCO ROOF DISCHARGE CAP.												

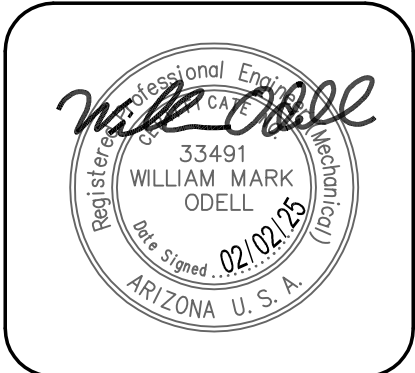
ELECTRIC HEATER SCHEDULE									
EQUIP. NO.	MANUFACTURER	MODEL NO.	TYPE	SERVICE/ LOCATION	BLOWER CFM	HEATER KW	VOLTS/ PHASE	AMPS	REMARKS
1	QMARK	GFR1500F	WALL HEATER	RISER ROOM	150	0.50	120/1	12.5	①②
① INTEGRAL THERMOSTAT. ② PROVIDE WITH SURFACE MOUNTING FRAME.									

GRILLES/REGISTERS/DIFFUSERS SCHEDULE										
MARK	DESCRIPTION	MODULE SIZE	TYPE	OBD	FRAME	MATERIAL	FINISH	MANUF.	MODEL	REMARKS
CD-1	SUPPLY DIFFUSER	24x24	SQUARE CEILING	NO	T-BAR	STEEL	WHITE	TITUS	TMS	8Ø NECK
CD-2	SUPPLY DIFFUSER	9x9	SQUARE LOUVERED	NO	SURFACE	STEEL	WHITE	TITUS	TDC	6Ø NECK
RG-1	RETURN GRILLE	12x22	SINGLE DFL	NO	T-BAR	STEEL	WHITE	TITUS	350RL	NECK SIZE PER PLAN
RG-2	RETURN GRILLE	22x22	SINGLE DFL	NO	T-BAR	STEEL	WHITE	TITUS	350RL	NECK SIZE PER PLAN
NOTES: 1. NECK SIZE SHOWN ON PLANS AND CORRESPONDS TO DUCT CONNECTION SIZE. 2. CONTRACTOR SHALL PROVIDE SQUARE TO ROUND ADAPTERS AS REQUIRED FOR INSTALLATION. 3. MOUNTING HEIGHT OF GRILLES AND EXACT LOCATION OF ALL DIFFUSERS TO FIELD COORDINATED AND APPROVED BY OWNER. 4. VERIFY MAKE, MODEL AND COLOR OF ALL DEVICES WITH OWNER.										



REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812
F 928-443-5815
email: wakaarchitect@gmail.com
www.kenson-associates.com

P.O. Box 11593
Prescott, AZ 86304

ARCHITECTURE & PLANNING

European Techniques 7
6686 Inter Cal Way
Prescott, AZ

103-50-019

DRAWING: Mechanical Schedules

PROJECT:

APN:

DRAWN BY
CHECKED BY
DATE November 12th, 2024
JOB NO. 803
SHEET

M2.1

MECHANICAL SPECIFICATIONS

GENERAL REQUIREMENTS
GENERAL PROVISIONS WHICH MAKE SPECIFIC REFERENCE TO ELECTRICAL DIVISION ONLY ARE INCLUDED HEREIN FOR CLARITY AND SIMPLIFICATION OF SPECIFICATIONS WRITING AND ARE NOT PART OF THE MECHANICAL WORK. THE WORK OF DIVISION 15, MECHANICAL, IS SUBJECT TO THE CONDITIONS OF THE CONDITIONS OF THE CONTRACT, DIVISION 1, GENERAL REQUIREMENTS, AND APPLICABLE REQUIREMENTS OF OTHER PORTIONS OF THE CONTRACT DOCUMENTS. EXAMINE AND BECOME FAMILIAR WITH ALL CONTRACT DOCUMENTS AND COORDINATE THE MECHANICAL WORK ACCORDINGLY.

INTENT
IT IS THE INTENTION OF THE SPECIFICATIONS AND DRAWINGS TO CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION. ANY APPARATUS, APPLIANCE, MATERIAL OR WORK NOT SHOWN ON THE DRAWINGS, BUT MENTIONED IN THE SPECIFICATIONS OR VICE VERSA, OR ANY INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE WORK COMPLETE AND READY FOR OPERATION, EVEN IF NOT PARTICULARLY SPECIFIED, SHALL BE PROVIDED WITHOUT ADDITIONAL EXPENSE TO THE OWNER. SHALL THERE APPEAR TO BE DISCREPANCIES OR QUESTIONS OF INTENT IN THE CONTRACT DOCUMENTS, REFER THE MATTER TO THE ARCHITECT FOR HIS DECISION BEFORE ORDERING ANY MATERIALS OR EQUIPMENT OR BEFORE THE START OF ANY RELATED WORK. THE DECISION OF THE ARCHITECT SHALL BE FINAL, CONCLUSIVE AND BINDING.

DRAWINGS AND DATA
DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE OF WORK AND TO INDICATE GENERAL ARRANGEMENT OF EQUIPMENT, DUCTS, CONDUITS, PIPING AND FIXTURES. THEY ARE NOT INTENDED TO SHOW EVERY OFFSET OR FITTINGS OR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED DURING INSTALLATION OF THE WORK. LOCATION OF ALL ITEMS NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. EXACT LOCATIONS NECESSARY TO SECURE BEST CONDITIONS AND RESULTS MUST BE DETERMINED AT PROJECT AND SHALL HAVE APPROVAL OF ARCHITECT BEFORE BEING INSTALLED. DO NOT SCALE DRAWINGS. IF SO DIRECTED BY ARCHITECT, WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF OTHER TRADES OR FOR PROPER EXECUTION OF WORK. INCLUDE MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER INSTALLATION AND OPERATION OF A SYSTEM OR PIECE OF EQUIPMENT IN BID PRICE.

CODES
INCLUDE IN WORK, WITHOUT EXTRA COST TO OWNER, LABOR, MATERIALS, SERVICES, APPARATUS, DRAWINGS (IN ADDITION TO CONTRACT DRAWINGS AND DOCUMENTS) REQUIRED TO COMPLY WITH APPLICABLE LAWS, ORDINANCES, RULES AND REGULATIONS. DRAWINGS AND SPECIFICATIONS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT THAN CODES, ORDINANCES, STANDARDS AND STATUTES. CODES, ORDINANCES, STANDARDS AND STATUTES TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH DRAWINGS OR SPECIFICATIONS. FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS AND CODES ARE MINIMUM REQUIREMENTS:

- A. APPLICABLE CITY, COUNTY, AND STATE MECHANICAL, ELECTRICAL, GAS, PLUMBING, HEALTH AND SANITARY CODES, LAWS AND ORDINANCES.
- B. CITY OR OTHER APPLICABLE BUILDING CODES.
- C. 2018 INTERNATIONAL MECHANICAL CODE WITH LOCAL AMENDMENTS.
- D. REGULATIONS, PERMITS, INSPECTIONS: COMPLY WITH ALL APPLICABLE CODED, RULES AND REGULATIONS. ALL MATERIALS, EQUIPMENT AND WORK MUST CONFORM TO THE INTERNATIONAL MECHANICAL CODE. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND LICENSES. WHEN REQUIRED BY CODE, ALL WORK MUST BE INSPECTED AND APPROVED BY LOCAL AUTHORITIES.

GENERAL
MATERIALS AND EQUIPMENT STANDARD PRODUCTS OF A REPUTABLE MANUFACTURER REGULARLY ENGAGED IN MANUFACTURE OF THE SPECIFIED ITEMS. WHERE MORE THAN ONE UNIT IS REQUIRED OF ANY ITEM, FURNISHED BY THE SAME MANUFACTURER, EXCEPT WHERE SPECIFIED OTHERWISE. INSTALL MATERIAL AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. SHOULD VARIANCE BETWEEN PLANS AND SPECIFICATIONS OCCUR WITH THESE, CONTACT ARCHITECT IMMEDIATELY SO THAT VARIATIONS IN INSTALLATION CAN BE KNOWN BY ALL PARTIES CONCERNED. PROVIDE EQUIPMENT FROM MANUFACTURER WHOSE PRODUCTS HAVE LOCAL REPRESENTATION.

EXECUTION
PROTECT EXISTING ACTIVE SERVICES (WATER, GAS, SEWER, ELECTRIC) WHEN ENCOUNTERED, AGAINST DAMAGE FROM CONSTRUCTION WORK. DO NOT PREVENT OR DISTURB OPERATION OF ACTIVE SERVICES WHICH ARE TO REMAIN. IF WORK MAKES TEMPORARY SHUTDOWNS OF SERVICES UNAVOIDABLE, CONSULT WITH OWNER AS TO DATES, PROCEDURES, AND ESTIMATED DURATION OF AT LEAST 10 WORKING DAYS IN ADVANCE OF DATE WHEN WORK IS TO BE PERFORMED. ARRANGE WORK FOR CONTINUOUS PERFORMANCE TO ASSURE THAT EXISTING OPERATING SERVICES WILL BE SHUT DOWN ONLY DURING THE TIME REQUIRED TO MAKE NECESSARY CONNECTIONS. IF A SYSTEM CANNOT SHUT DOWN, INSTALL TEMPORARY BYPASSES OR JUMPERS UNTIL CONNECTIONS ARE COMPLETE. CONTRACTOR RESPONSIBLE FOR ALL COSTS INCURRED BY ABOVE SHUTDOWNS, INCLUDING BYPASS OR JUMPER INSTALLATIONS, FOR WORK PERFORMED UNDER THIS SECTION. IF EXISTING ACTIVE UTILITY SERVICES ARE ENCOUNTERED WHICH REQUIRE RELOCATION, MAKE REQUEST TO PROPER AUTHORITIES FOR DETERMINATION OF PROCEDURES. PROPERLY TERMINATE EXISTING SERVICES TO BE ABANDONED IN CONFORMANCE WITH REQUIREMENTS OF AUTHORITIES. WHERE CONNECTIONS OR DISRUPTIONS ARE MADE TO EXISTING SYSTEMS, REACTIVATE, REFILL, AND RECHARGE ALL COMPONENTS AND RESTORE SYSTEMS TO OPERATING CONDITIONS AT TIME OF DISRUPTION.

GUARANTEE
EACH COMPLETE SYSTEM GUARANTEED BY CONTRACTOR FOR A PERIOD OF ONE YEAR, FROM DATE OF ACCEPTANCE OF WORK BY OWNER IN WRITING, TO BE FREE OF DEFECTS OF MATERIALS AND WORKMANSHIP, AND TO PERFORM SATISFACTORILY UNDER ALL CONDITIONS OF LOAD OR SERVICE. THE GUARANTEES PROVIDE THAT ANY ADDITIONAL CONTROLS, PROTECTIVE DEVICES, OR EQUIPMENT BE PROVIDED AS NECESSARY TO MAKE THE SYSTEM OF EQUIPMENT OPERATE SATISFACTORILY, AND THAT ANY FAULTY MATERIALS OR WORKMANSHIP BE REPLACED OR REPAIRED. ON FAILURE OF GUARANTOR TO DO THE ABOVE AFTER WRITTEN NOTICE FROM OWNER, THE OWNER MAY HAVE THE WORK DOWN AT THE COST OF GUARANTOR. LOSS OF REFRIGERANT IS CONSIDERED A DEFECT IN WORKMANSHIP AND/OR EQUIPMENT, TO BE CORRECTED AS REQUIRED AT NO EXTRA COST TO THE OWNER. PROVIDE EXTENDED FIVE (5) YEAR FACTORY PARTS & LABOR WARRANTY ON ALL AIR CONDITIONING COMPRESSORS.

AIR CONDITIONING, HEATING AND VENTILATING

SCOPE
WORK UNDER THIS SECTION INCLUDES FURNISHING ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR THE REMODELING, INSTALLATION AND PLACING INTO OPERATION THE HEATING, VENTILATING AND AIR CONDITIONING WORK AS SPECIFIED HEREIN AND INDICATED ON THE DRAWINGS.

VERIFICATION OF DIMENSIONS:
SCALED AND FIGURED DIMENSIONS ARE APPROXIMATE ONLY. BEFORE PROCEEDING WITH WORK, CAREFULLY CHECK AND VERIFY AT THE SITE, AND RESPONSIBLE FOR PROPERLY FITTING EQUIPMENT AND MATERIALS TOGETHER AND TO THE STRUCTURE IN SPACES PROVIDED. DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND MANY OFFSETS, BENDS, SPECIAL FITTINGS AND EXACT LOCATIONS ARE NOT INDICATED. CAREFULLY STUDY DRAWINGS AND PREMISES IN ORDER TO DETERMINE BEST METHODS, EXACT LOCATIONS, ROUTES AND BUILDING OBSTRUCTIONS, PRESERVE HEADROOM, AND KEEP OPENINGS AND PASSAGEWAYS CLEAR.

CUTTING AND PATCHING:
CUT EXISTING WORK AND PATCH AS NECESSARY TO PROPERLY INSTALL THE NEW WORK. AS THE WORK PROGRESSES, LEAVE NECESSARY OPENINGS, HOLES AND CHASES, ETC., IN THEIR CORRECT LOCATIONS. IF THE REQUIRED OPENINGS, HOLES AND CHASES ETC., ARE NOT IN THEIR CORRECT LOCATIONS, MAKE THE NECESSARY CORRECTIONS AT NO COST TO THE OWNER. AVOID EXCESSIVE CUTTING AND DO NOT CUT STRUCTURAL MEMBERS WITHOUT CONSENT OF ARCHITECT.

REGULATIONS, PERMITS & INSPECTIONS
COMPLY WITH ALL APPLICABLE CODES, RULES AND REGULATIONS. ALL MATERIALS, EQUIPMENT AND WORK MUST CONFORM TO THE INTERNATIONAL MECHANICAL CODE. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND LICENSES. WHEN REQUIRED BY CODE, ALL WORK MUST BE INSPECTED AND APPROVED BY LOCAL AUTHORITIES.

DUCTWORK
ALL DUCTWORK FABRICATED AS PER LATEST INTERNATIONAL MECHANICAL CODE REQUIREMENTS AND SMACNA MANUAL. EXTENSION OF EXISTING DUCTWORK SHALL BE MADE WITH SOME MATERIAL. DUCTWORK SHALL BE CONSTRUCTED OF NEW HOT-DIPPED GALVANIZED SHEET METAL ASTM A-120 FOR EACH SIDE. TAPE ALL CROSS-JOINTS IN SHEET METAL DUCT WITH HARDCAST. TAKE-OFF FITTINGS SHALL BE CONICAL SPIN-IN WITH QUADRANT DAMPER. TURNING VANES SHALL BE INSTALLED IN ALL MITERED ELBOWS.

FLEXIBLE DUCT
FLEXIBLE DUCT MAY BE USED WHEN CONCEALED FOR FINAL CONNECTION TO AIR DISTRIBUTION DEVICES, BUT SHALL NOT EXCEED 8 FEET IN LENGTH. FLEXIBLE DUCT SHALL HAVE A MINIMUM R-6 INSULATION VALUE.

DUCT INSULATION
DUCT SIZES ON DRAWINGS ARE "CLEAR INSIDE." INCREASE SHEET METAL SIZES ACCORDINGLY FOR LINED DUCTWORK. ADHESIVE AND INSULATING MATERIALS SHALL HAVE COMPOSITE FIRE AND SMOKE HAZARD RATINGS MAXIMUM 25 FOR FLAME SPREAD AND 50 FOR SMOKE DEVELOPED. ADHESIVES SHALL BE WATERPROOF.

DUCT INSULATION SCHEDULE:
CONCEALED RECTANGULAR LINED OR WRAPPED
CONCEALED ROUND LINED OR WRAPPED

DUCTS IN CONDITIONED SPACE:
RECTANGULAR LINED DUCTWORK -- SEMI-RIGID GLASS FIBER INSULATION, 1 1/2 PCF, 1 1/2" THICK, THERMAL CONDUCTIVITY AT 75°: MAXIMUM 0.17 BTU/IN./SQ. FT./DEG./HR. MINIMUM "R-VALUE" SHALL BE 6.0.

DUCTS IN CEILINGS OR OTHER UNCONDITIONED SPACE:
LINED DUCTWORK -- SEMI-RIGID GLASS FIBER INSULATION, 1 1/2 PCF, 2" THICK, THERMAL CONDUCTIVITY AT 75°: MAXIMUM 0.13 BTU/IN./SQ. FT./DEG./HR. MINIMUM "R-VALUE" SHALL BE 8.0.

WRAPPED DUCTWORK -- FIBER GLASS BLANKET WITH FRK VAPOR RETARDING FACING. 0.75 PCF, 3" THICK, WITH A MINIMUM INSTALLED "R-VALUE" OF 8.0. (ASSUMES 25% COMPRESSION)

HVAC EQUIPMENT CONDENSATE DRAINS
USE TYPE M COPPER TUBING AND WROUGHT COPPER MECHANICAL FITTINGS. EXTEND DRAINS TO NEAREST ROOF DRAIN OR LAVATORY TAIL-PIECE (FURNISHED BY PLUMBER). SLOPE DRAIN AT A MINIMUM OF 1/8" PER FOOT.

AIR SYSTEM BALANCING
AIR SYSTEMS AND AIR DISTRIBUTION TEST AND BALANCE: THE CONTRACTOR SHALL ADJUST AND BALANCE AIR MOVING EQUIPMENT AND AIR DISTRIBUTING OR EXHAUSTING SYSTEMS AS HEREIN SPECIFIED AND UPON REQUEST PROVIDE REPORT OF TEST AND BALANCING TO ARCHITECT/ENGINEER FOR REVIEW.

ASHRAE 62.1
OUTSIDE AIR VENTILATION CALC

Outside Air for Unit F-1								
Space	Area	Occ Density	Rp	Pz	Ra	Az	Vbz	
Office	488	5	5	2.44	0.06	488	41.5	
Breakroom	376	25	5	9.4	0.06	376	69.6	
Storage	303	0	0	0	0.12	303	36.4	
Total Net OSA Required							147	
Add'l required*							68	
Total OSA							215	
* Total OSE required is less then that exhausted Additional CFM added for required make up air								

6.2.2.1 Breathing Zone Outdoor Airflow. The design outdoor airflow required in the breathing zone of the occupiable space or spaces in a zone, i.e., the breathing zone outdoor airflow (V_{bz}), shall be determined in accordance with Equation 6-1.

$$V_{bz} = R_p \cdot P_z + R_a \cdot A_z \quad (6-1)$$

where

A_z = zone floor area: the net occupiable floor area of the zone in m^2 (ft^2)

P_z = zone population: the largest number of people expected to occupy the zone during typical usage. If the number of people expected to occupy the zone fluctuates, P_z may be estimated based on averaging approaches described in Section 6.2.6.2

Note: If P_z cannot be accurately predicted during design, it shall be an estimated value based on the zone floor area and the default occupant density listed in Table 6-1.

R_p = outdoor airflow rate required per person as determined from Table 6-1

Note: These values are based on adapted occupants.

R_a = outdoor airflow rate required per unit area as determined from Table 6-1



COMcheck Software Version COMcheckWeb
Mechanical Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: European Technologies
Location: Prescott, Arizona
Climate Zone: 4b
Project Type: New Construction

Construction Site: Prescott, Arizona 86305

Owner/Agent:

Designer/Contractor:

William Odell
OSE Design Group, LLC
11759 N 143rd Ave
Surprise, Arizona 85379
623-444-6143
markodell@osedg.com

Credits: 1.0 Required 1.0 Proposed
Reduced Lighting Power, 1.0 credit

Mechanical Systems List

QuantitySystem Type & Description

- 2 4 ton AC & Furnace (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 48 kBtu/h
Proposed Efficiency = 96.00% Et, Required Efficiency: 80.00 % Et. or 80% AFUE
Cooling: 1 each - Split System, Capacity = 36 kBtu/h, Air-Cooled Condenser, No Economizer, Economizer exception: High Efficiency Equipment
Proposed Efficiency = 16.00 SEER, Required Efficiency = 13.00 SEER
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00
Fan System: 3 ton fan -- Compliance (Motor nameplate HP and fan efficiency method) : Passes
- Fans:
FAN 3 Supply, Constant Volume, 1200 CFM, 0.5 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP
- 7 Warehouse Unit Heaters (Unknown w/ PerimeterSystem):
Heating: 1 each - Unit Heater, Gas, Capacity = 60 kBtu/h
Proposed Efficiency = 83.00% Ec, Required Efficiency: 80.00 % Ec
Fan System: Unit heater | warehouse -- Compliance (Motor nameplate HP and fan efficiency method) : Passes
- Fans:
FAN 5 Supply, Constant Volume, 961 CFM, 0.1 motor nameplate hp, 69.0 fan efficiency grade, 50.0 total fan efficiency, 50.0 design fan efficiency

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

William Odell, P.E. January 23, 2025
Name - Title Signature Date

Project Title: European Technologies
Data filename:
Report date: 01/23/25
Page 1 of 9

DUCT CONSTRUCTION NOTES

1 -- ALL DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH "ASHRAE GUIDE" AND "SMACNA STANDARDS" AND IN CONFORMANCE WITH REQUIREMENTS OF LOCAL BUILDING, MECHANICAL AND ENERGY CONSERVATION CODES. WHERE MORE THAN ONE REGULATION OR CODE APPLIES, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.

2 -- FLEXIBLE DUCTWORK SHALL COMPLY WITH THE CLASS I REQUIREMENTS OF THE NFPA BULLETIN NO. 90A AND SHALL BE INSULATED WITH 1" FIBERGLASS, SUPPORTED BY HELICALLY WOUND STEEL WIRE WITH REINFORCED METALIZED OUTER JACKET RATED FOR USE IN PLENUMS. ATTACHMENT SHALL BE WITH WORM DRIVE CLAMPS. LENGTH SHALL NOT EXCEED 10'-0", EXCEPT AS APPROVED BY ARCHITECT.

3 -- PROVIDE MANUAL BALANCING DAMPER AT EACH BRANCH DUCT TAKE OFF.

4 -- ALL DUCTWORK JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTION ON DUCTWORK SHALL BE LISTED AND LABELED BY UL 181A OR 181B TAPES AND MASTICS.

5 -- ALL AIR SUPPLY AND RETURN DUCTS LOCATED IN CONDITIONED SPACES OR UNCONDITIONED SPACES SEPARATED FROM BUILDING EXTERIOR SHALL HAVE A MIN. R-5 INSULATION VALUE. ALL AIR SUPPLY AND RETURN DUCTS LOCATED IN UNCONDITIONED SPACES NOT SEPARATED FROM BUILDING EXTERIOR SPACES OR EXTERIOR DUCTS SHALL HAVE A MIN. R-8 INSULATION.

6 -- PROVIDE RADIUS ELBOWS, TURNING VANES, AND SPLITTER DAMPERS IN BRANCHES AND EXTRACTORS WHERE APPLICABLE.

7 -- TURNING VANES SHALL BE INSTALLED IN ALL MITERED ELBOWS.

8 -- BRANCH DUCT SERVING DIFFUSERS SHALL BE SIZE AS INDICATED. PROVIDE INCREASER OR SHEET METAL PLENUM TO CONNECT TO DIFFUSER AS REQUIRED.

9 -- ALL DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSIONS. IF DUCT LINER IS USED FOR INSULATION, CONTRACTOR SHALL INCREASE DUCT SIZE ACCORDINGLY.

10 -- HANGERS FOR SHEET METAL DUCTWORK SHALL BE INSTALLED AS REQUIRED BY 2018 IMC.

COORDINATION NOTES

1 -- COORDINATE OPENING'S FOR GRILLES, REGISTERS, DIFFUSERS AND DUCTWORK WITH FRAMING CONTRACTOR PRIOR TO ROUGH-IN.

2 -- COORDINATE EXACT LOCATION OF ALL GRILLES, REGISTERS AND DIFFUSERS WITH ARCHITECTURAL PLANS.

3 -- LIGHTING & SPRINKLER HEADS TAKE PRECEDENCE OVER DIFFUSER LOCATION. CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS TO DIFFUSERS TO AVOID ANY CONFLICT WITH LIGHTING LAYOUT & SPRINKLER HEADS.

4 -- CONTRACTOR TO COORDINATE THERMOSTAT LOCATIONS WITH OWNER & ARCHITECT PRIOR TO MOUNTING.

5 -- ALL THERMOSTATS ARE TO BE MOUNTED AT A HEIGHT OF 48" ABOVE THE FLOOR LEVEL FOR DISABLED ACCESS.

GENERAL REQUIREMENTS

1 -- PROVIDE CLEARANCES AS PER MANUFACTURER'S RECOMMENDATIONS.

2 -- PITCH CONDENSATE DRAIN LINE 1/8" PER 12" RUN TOWARDS TERMINATION. INSULATE IN CONDENSATE DRAIN LINE WITH 3/8" CLOSED CELL "ARMIFLEX" TUBE INSULATION, TO PREVENT CONDENSATE DRIP.

3 -- PRIOR TO THE CONTRACTOR ORDERING OR SETTING ANY AIR CONDITIONING EQUIPMENT, DUCTWORK, OR AIR DEVICE, HE SHALL VERIFY LOCATION OF PLACEMENT WITH STRUCTURAL DRAWINGS AND CONFIRM WEIGHTS, DISCHARGE CONFIGURATION, SIZES, ELECTRICAL CHARACTERISTICS AND ANY OTHER DIMENSIONAL DATA WHICH MIGHT AFFECT THE SUCCESSFUL INSTALLATION OF THE EQUIPMENT.

4 -- KEEP ALL VENTS THROUGH ROOF AND EXHAUST DISCHARGE DUCTS A MINIMUM OF 10'-0" FROM OUTSIDE AIR INTAKES OR WINDOWS AND FROM ALL VERTICAL PORTIONS OF THE BUILDING.

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C. and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P 928-443-5812
F 928-443-5815
email: wakaarchitect@gmail.com
www.kenson-associates.com

P.O. Box 11593
Prescott, AZ 86304

ARCHITECTURE & PLANNING

DRAWING: Mechanical Specifications

PROJECT: European Techniques 7
6886 Inter Cal Way
Prescott, AZ

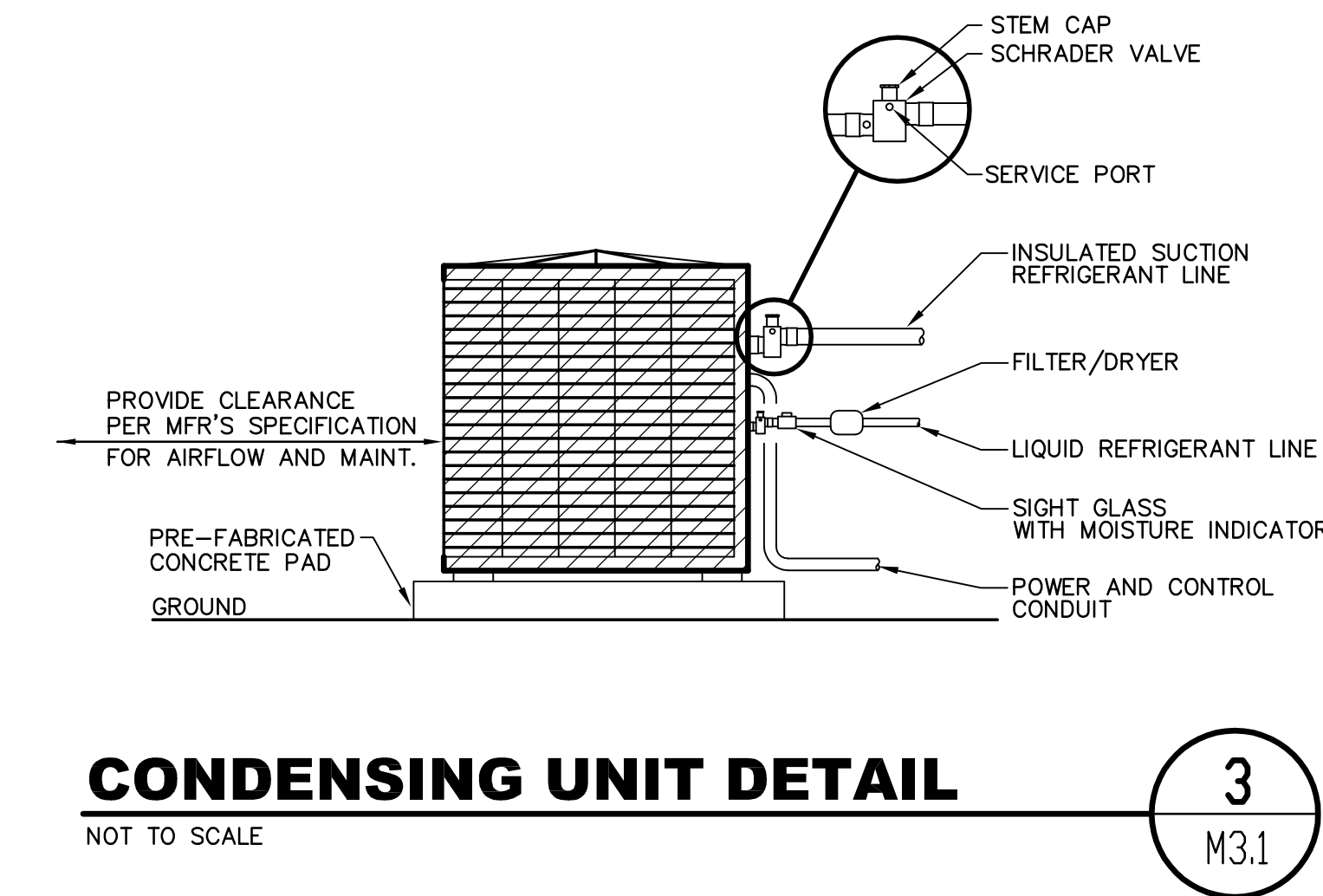
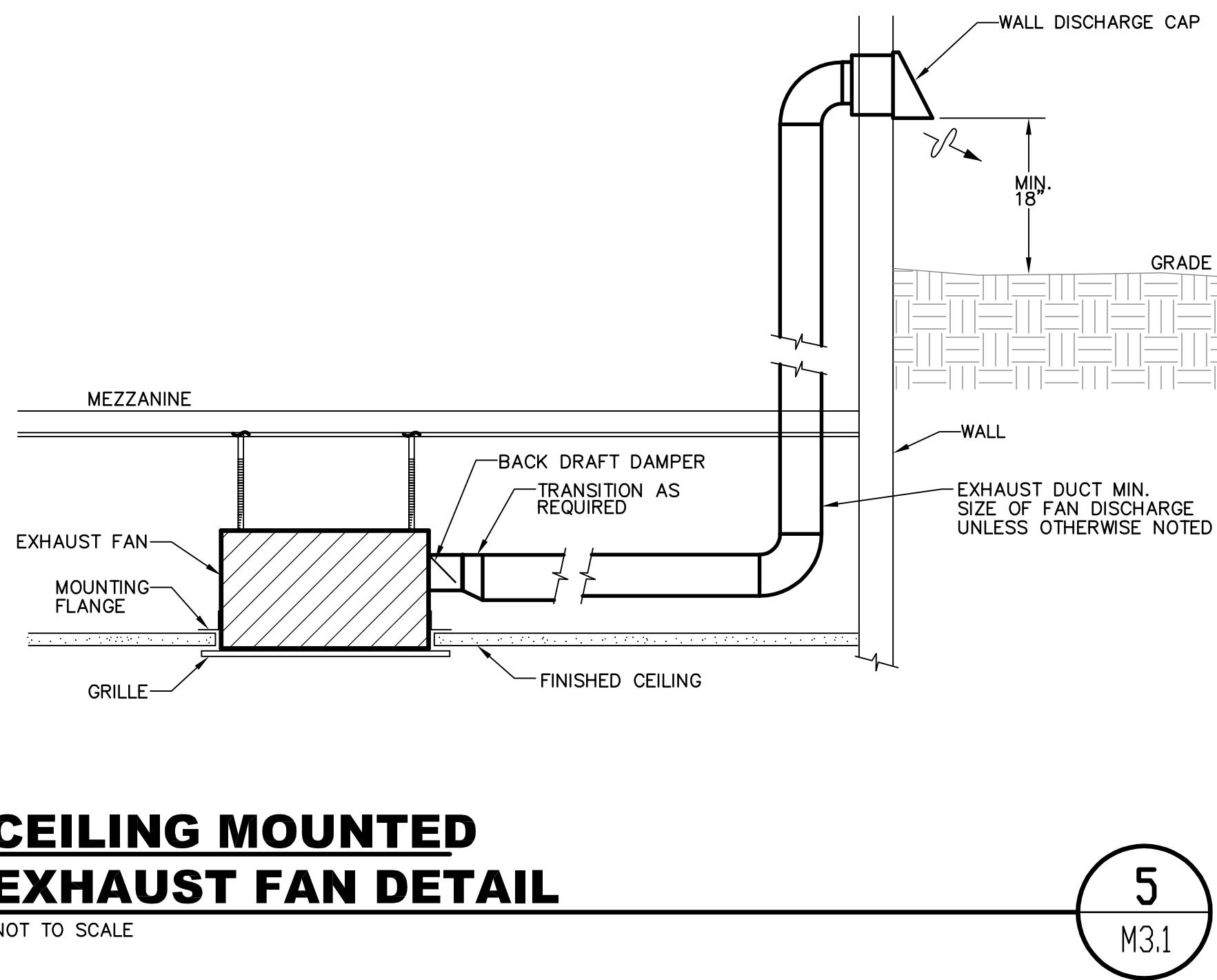
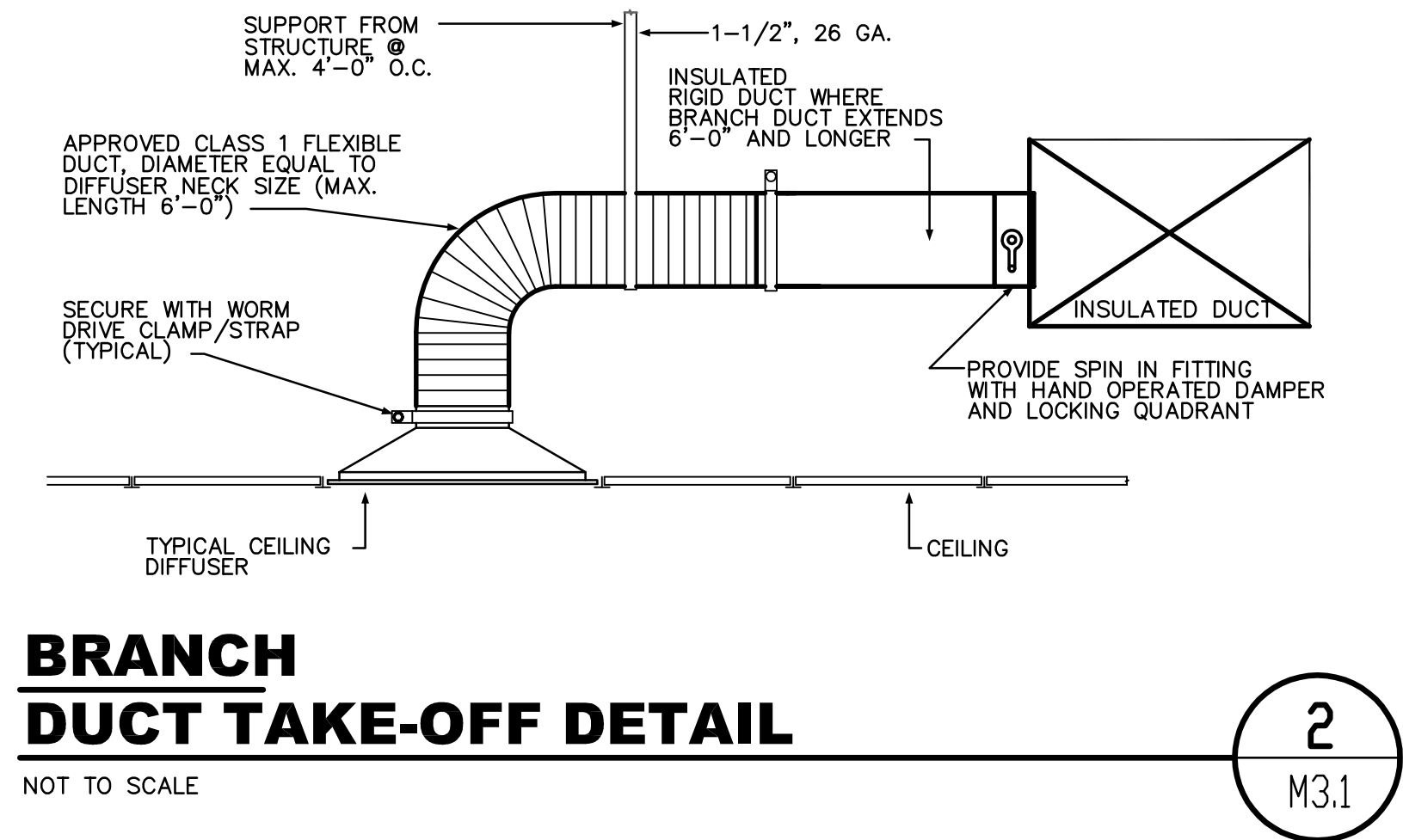
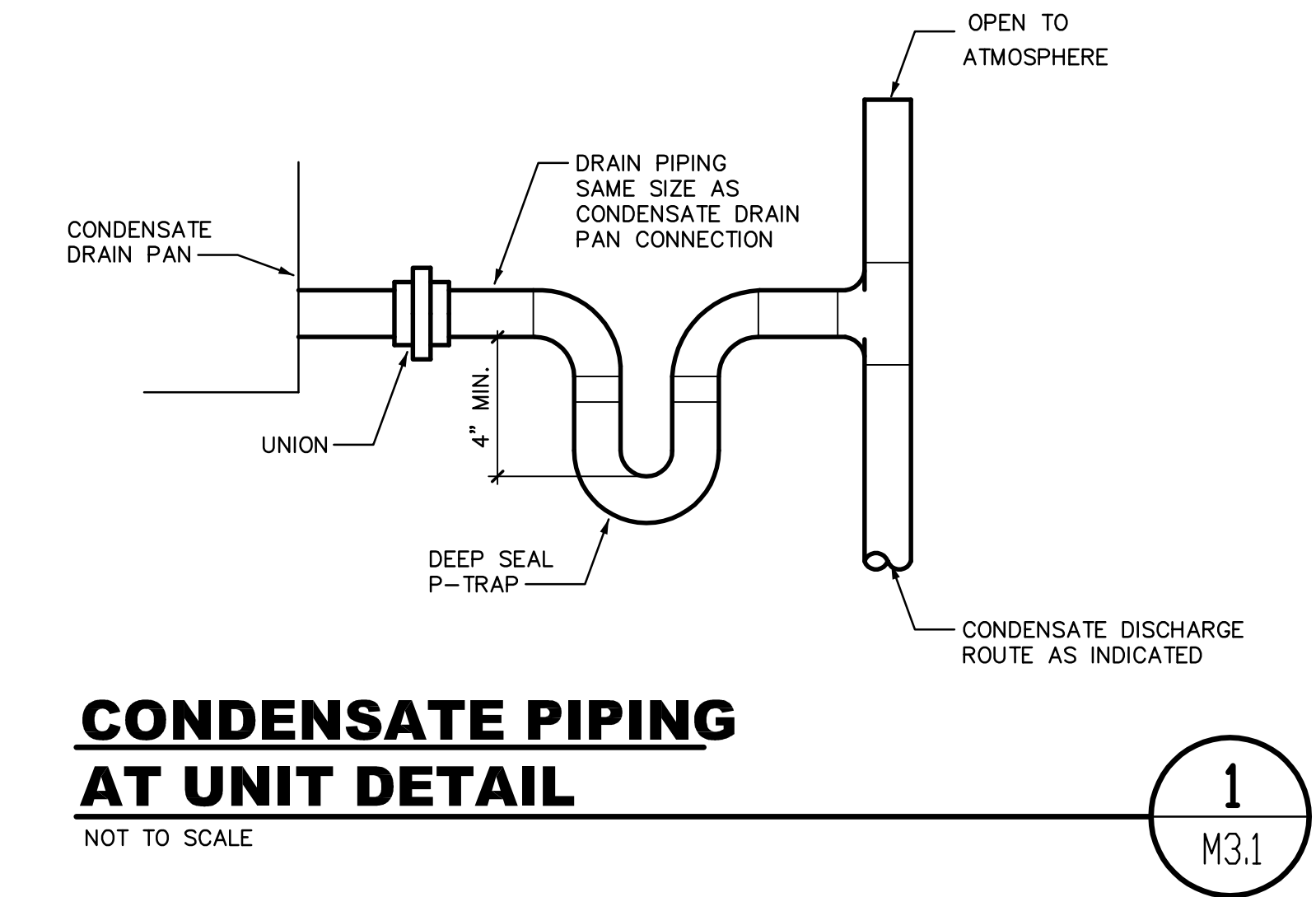
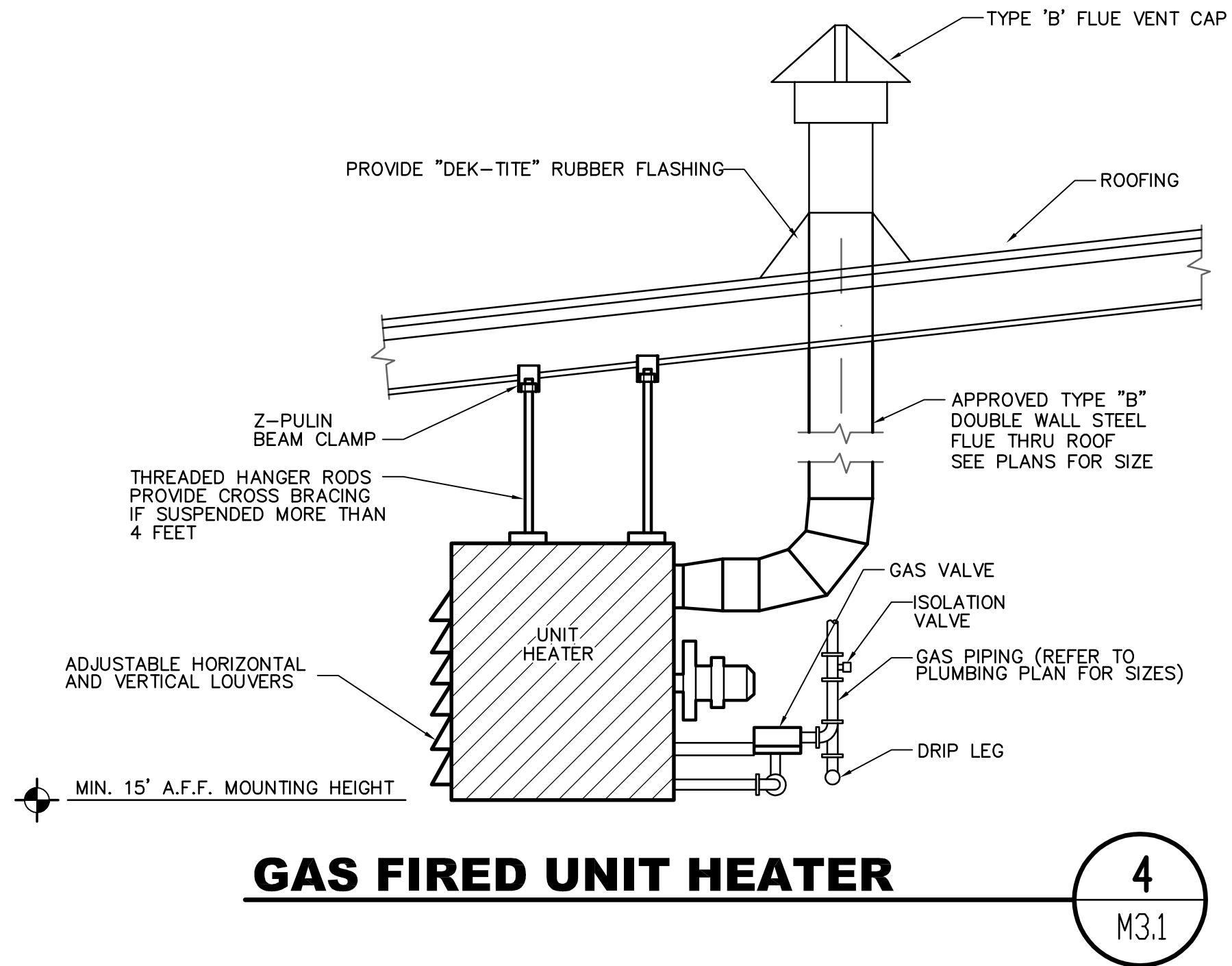
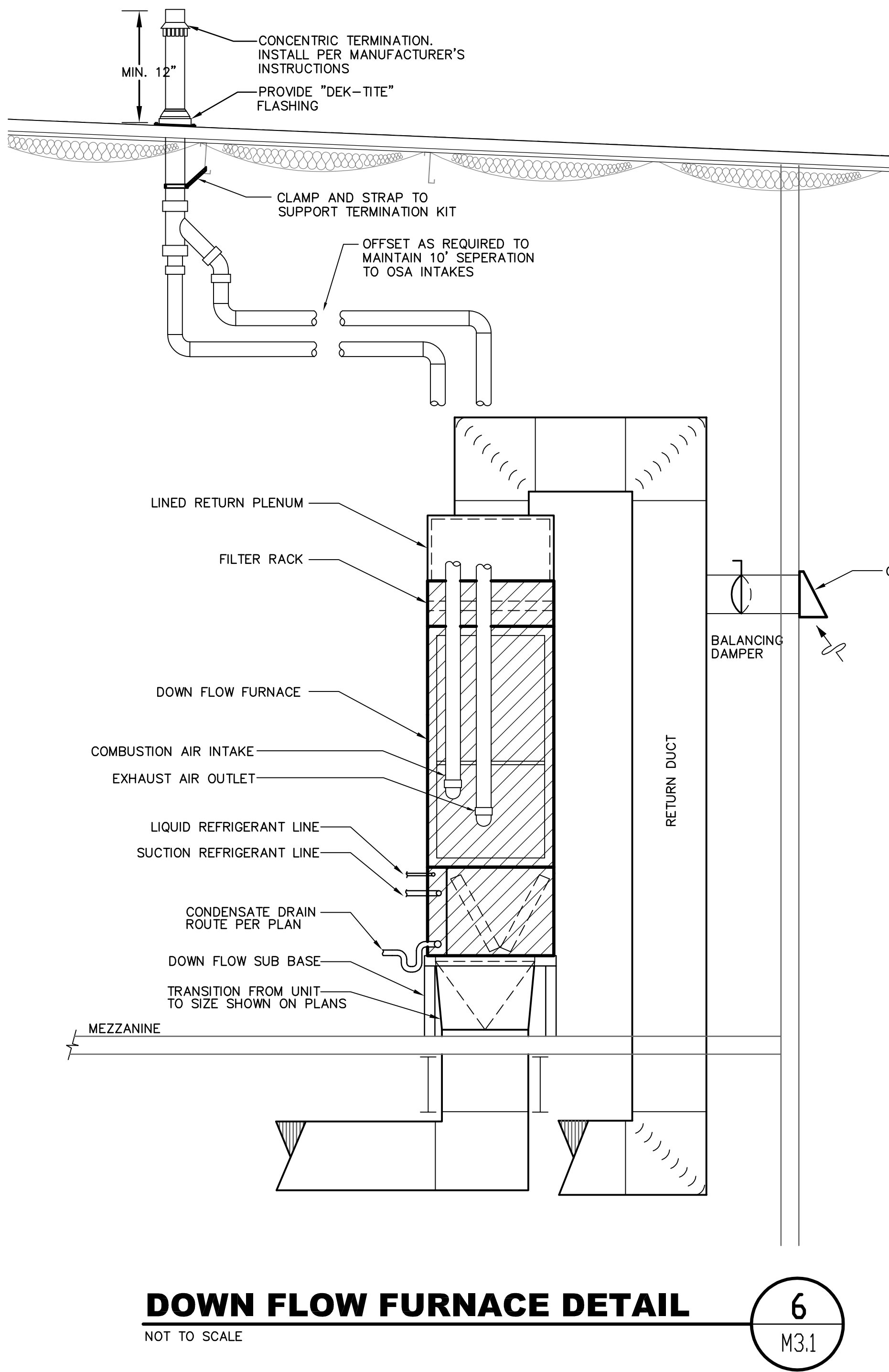
APN: 103-50-019

DRAWN BY
CHECKED BY
DATE November 12th, 2024
JOB NO. 803
SHEET

M2.2



611 West Delano Ave
Prescott, AZ 86301
(802) 499-0001
Project #24075
19922 N. 153rd Ln.
Surprise, AZ 85379
(623) 444-6143



REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P.O. Box 11593
Prescott, AZ 86304

P 928-443-5812
F 928-443-5815

email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Mechanical Details

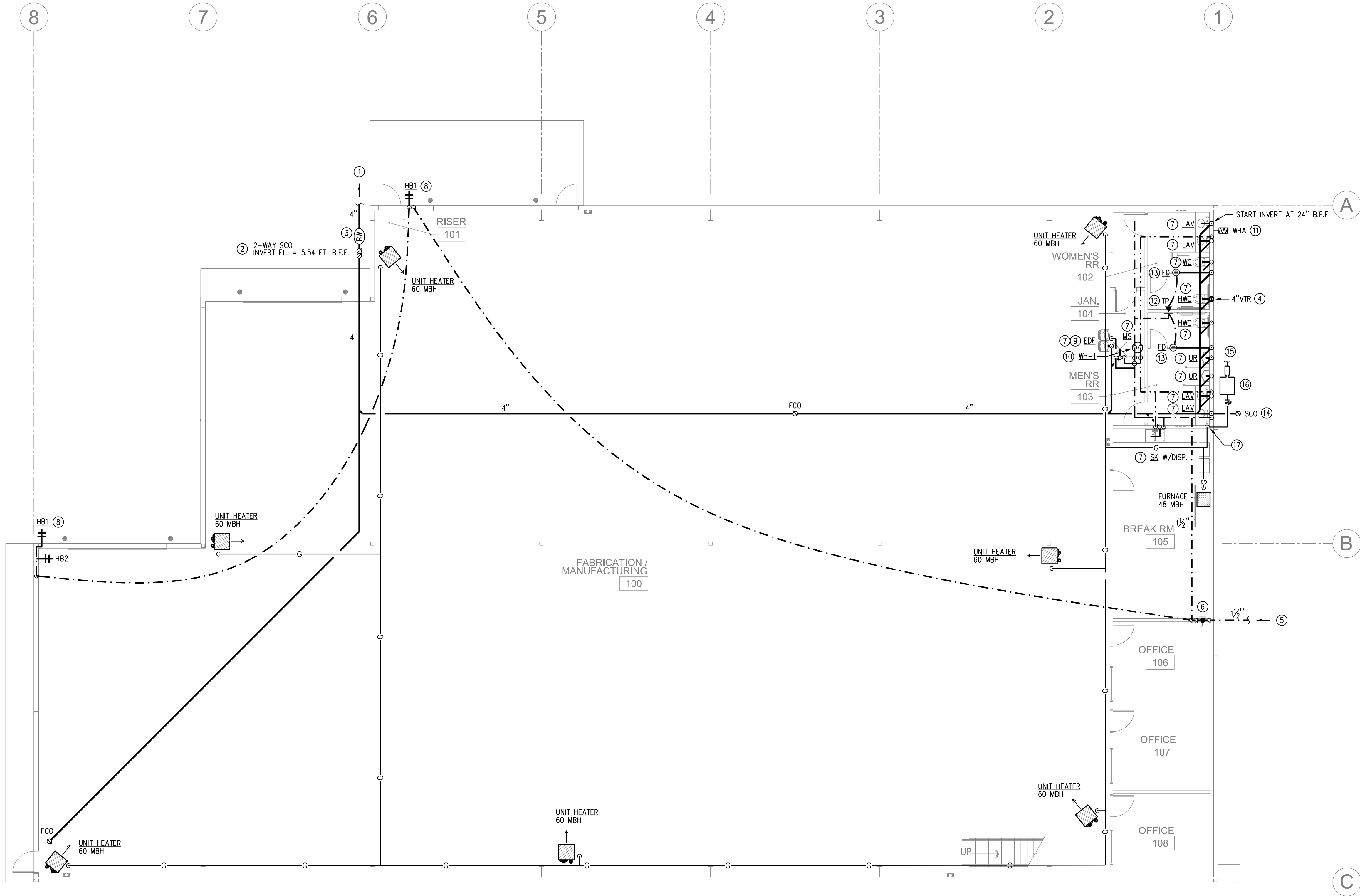
PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY
CHECKED BY
DATE November 12th, 2024
JOB NO. 803
SHEET

M3.1

Feb 06, 2025 - 10:04pm



PLUMBING FLOOR PLAN
SCALE: 1/8" = 1' - 0"

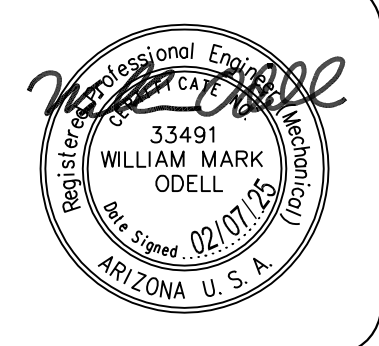


KEYED NOTES

- NEW 4" BUILDING WASTE TO 5' BEYOND BUILDING. REFER TO CIVIL PLANS FOR CONTINUATION.
- LEAVING INVERT COORDINATE WITH CIVIL.
- PROVIDE AND INSTALL NEW BACKWATER VALVE.
- PROVIDE AND INSTALL NEW 4" VTR
MUST BE MINIMUM OF 10' AWAY FROM ANY FRESH AIR INTAKES OR OPENINGS INTO BUILDING. OFF-NSET IN CEILING SPACE FROM OSA, PARAPET, CRICKETS, ROOF DRAIS, ETC., AS NECESSARY.
- PROVIDE AND INSTALL NEW 1-1/2" CW LINE SERVING BUILDING FROM A NEW 1" WATER METER AND CITY APPROVED REDUCED PRESSURE BACKFLOW PREVENTER. SEE CIVIL DRAWINGS FOR CONTINUATION. PROVIDE FULL PORT S.O.V. IN RISER WITH INTERIOR ACCESS PANEL. FINISH PER ARCHITECT.
- PROVIDE AND INSTALL EPFO WITH MANUF. RECOMMENDED AND CITY APPROVED INSULATED BOX AS REQUIRED TO PREVENT WATER LINE FROM FREEZING.
- CONTR. TO COORDINATE WITH CIVIL DRAWINGS, FOR EXACT SIZE, LOCATION AND ROUTING.
- 1-1/2" CW DROP WITH S.O.V. AND ACCESS DOOR IN BREAK ROOM. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECT.
- PROVIDE NEW WATER, WASTE AND VENT TO NEW PLUMBING FIXTURE AS SHOWN AND AS REQUIRED.
- CONNECT NEW WASTE, VENT AND WATER LINES TO NEAREST AVAILABLE WASTE, VENT AND WATER LINES.
- PROVIDE NEW WALL CLEANOUT.
- NON FREEZE TYPE HOSE BIBB.
- OPTIONAL APRON TO BE PROVIDED AND INSTALLED UNDER UPPER UNIT OF ADA HIGH-LOW DRINKING FOUNTAIN.
- PROVIDE AND INSTALL NEW 40 GAL. TANK TYPE ELECTRIC WATER HEATER. COMPLETE WITH ALL MANUFACTURERS RECOMMENDED ACCESSORIES, INCLUDING VALVES, UNIONS, P&T RELIEF, EXPANSION TANK, HEAT TRAPS, ETC. PROVIDE CLEARANCES AND INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER (OR FIELD CONDITIONS). PROVIDE AND INSTALL FULL SIZE P&T RELIEF DRAIN LINE. TERMINATE AT MOP SINK WITH TURN DOWN AND AIR CAP.
- WATER HAMMER ARRESTER - PROVIDE AND INSTALL NEW WATER HAMMER ARRESTER, "JAY R. SMITH" PDI TYPE 'C' (FIGURE 5020) WITH BALL VALVE, IN FURR-OUT WALL WITH ACCESS DOOR, AS REQUIRED FOR FV HWC. INSTALL AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
- TRAP PRIMER - WITH BALL VALVE, BACKFLOW PREVENTION DEVICE AND WITH 1/2" COLD WATER LINE TO FLOOR DRAIN. PROVIDE WITH ACCESS DOOR (IN MENS RESTROOM SIDE). PROVIDE WITH DISTRIBUTION UNIT D-2.
- FD - INSTALL FLOOR DRAIN FLUSH WITH FINISHED FLOOR AND PROVIDE WITH TRAP PRIMER. COORDINATE EXACT LOCATION IN FIELD PER ARCH. AND AS REQUIRED TO AVOID PARTITION POST.
- EXTEND CLEANOUT TO GRADE AS NECESSARY.
- NEW GAS SERVICE FROM MAIN TO METER AS REQUIRED BY LOCAL GAS COMPANY.
- GAS METER - APPROX. PROPOSED GAS METER LOCATION.
- PROVIDE AND INSTALL NEW GAS METER, REGULATOR, UNIONS, AND SHUT-OFF-COCKS AS REQUIRED BY LOCAL GAS CO.
- COORDINATE GAS METER, SIZE, LOCATION, ACCESSORIES, INSTALLATION REQUIREMENTS, ETC., WITH LOCAL GAS CO.
- THERE HAS TO BE OPEN SKY ABOVE.
- MUST BE MIN. 3 FT. AWAY FROM ANY DOORS, WINDOWS, AIR INTAKES, ETC.
- MUST BE MIN. 5 FT. AWAY FROM ANY ELECTRICAL METER/BOX/OUTLET/ETC.
- GAS PIPING RISE IN WALL VOID TO CEILING SPACE. NO EXPOSED PIPE WILL BE ALLOWED (TYP.).

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C. and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.



P.O. Box 11593
Prescott, AZ 86304
P 928-443-5812
F 928-443-5815
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Plumbing Floor Plan

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY
CHECKED BY
DATE November 12th, 2024
JOB NO. 803
SHEET

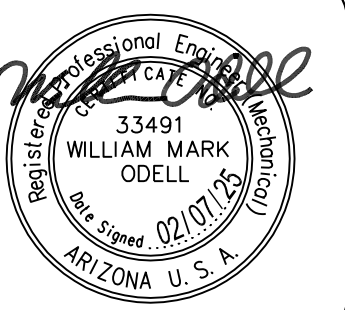
P1.1



11759 N. 143rd Ave. - Surprise, AZ 85379 Project #24075
(823) 444-6143

REVISIONS	BY

These drawings are the property of J. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of J. Alan Kenson & Associates, P.C.



W. ALAN IXCILSON & ASSOCIATES, I.C.

P 928-443-5812
F 928-443-5815
P.O. Box 11593
Prescott, AZ 86304

email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Forming Collections

PROJECT:
European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY

HECKED BY

DATE
November 12th, 2024

OB NO.	803
SHEET	

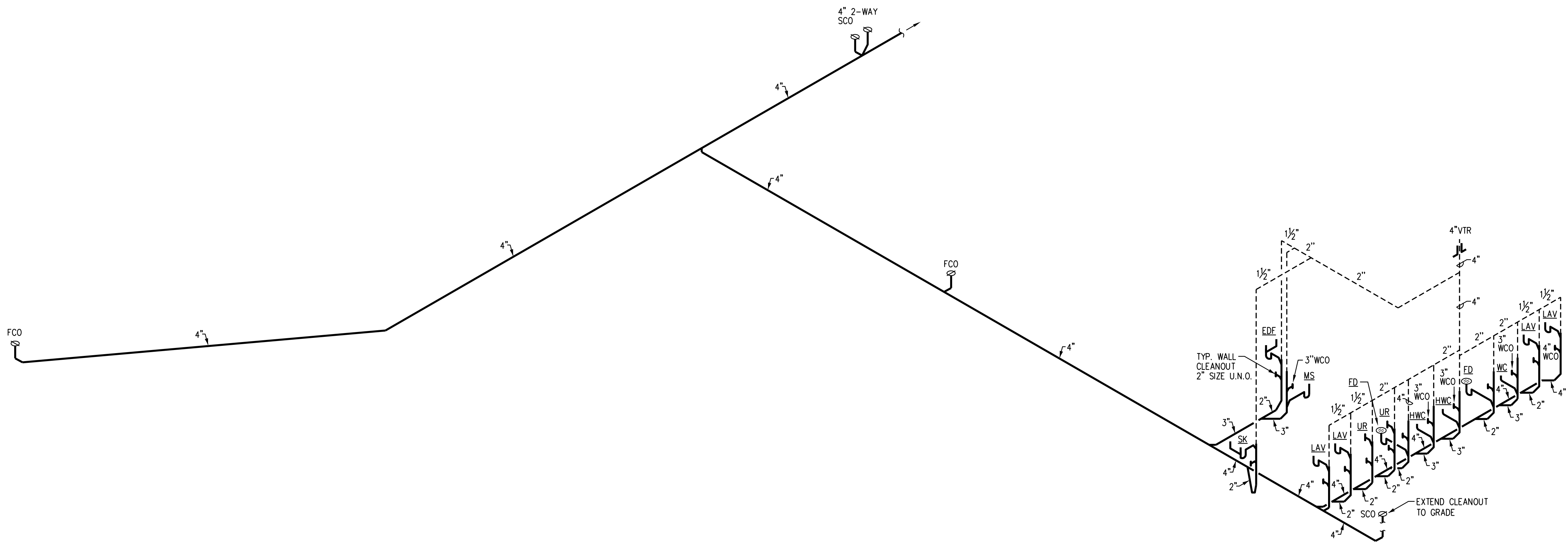
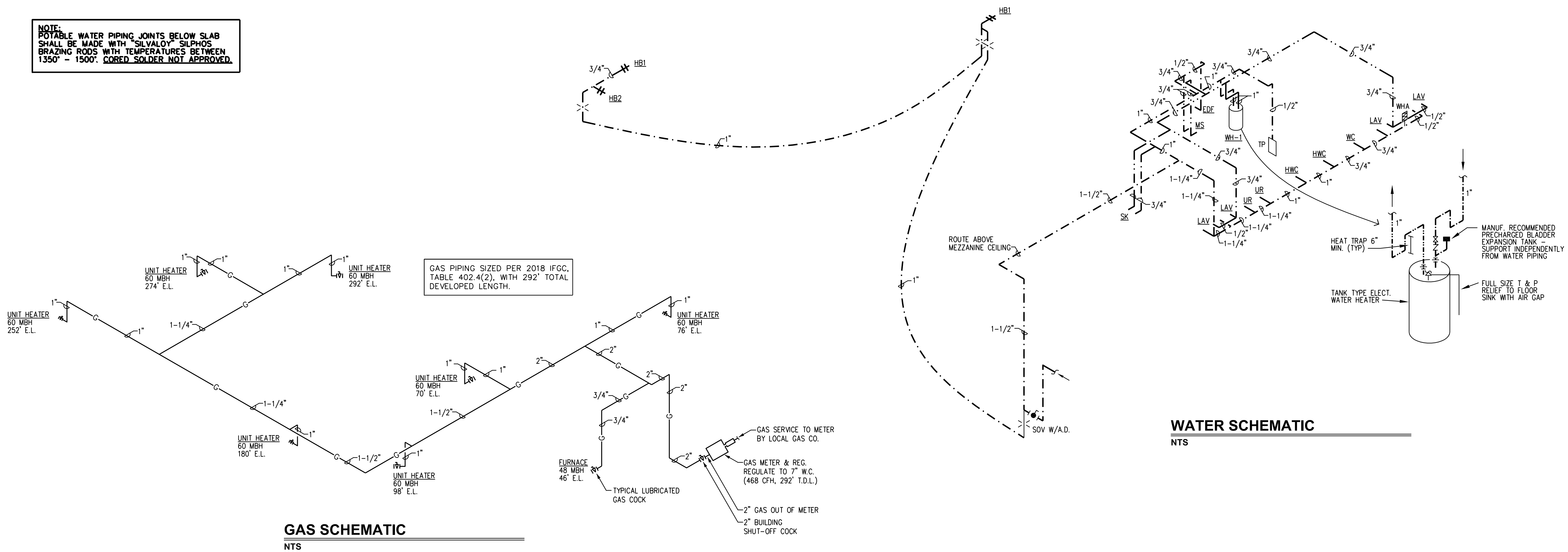
SHEET

P1.2



OSE
Design Group, LLC
Consulting Engineers

11759 N. 143rd Ave.- Surprise, AZ 85379 Project
(623) 444-6143 #24073



WASTE & VENT SCHEMATIC

ELECTRIC WATER HEATER SCHEDULE								
MARK	MANUF.AC.	MODEL	STORAGE CAPACITY IN GALS.	KW INPUT	VOLTAGE/ PHASE	GALLON PER HR. REC. AT 100° F T.R.	WATER OUTLET TEMP. °F	REMARKS
WH-1	AO SMITH	DEN-40	40	4.5	REFER TO ELECT.	18	140	NON-SIMULTANEOUS WIRING

1. PROVIDE HEAT TRAPS ON NON-CIRCULATING SYSTEMS ON SUPPLY AND DISCHARGE PIPING.
2. MINIMUM PERFORMANCE PER IECC 504.2
3. VERIFY ALL ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
4. NON-SIMULTANEOUS DUAL ELEMENTS.
5. PROVIDE CLEARANCES AS PER CODE STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
6. INSTALL WATER HEATER AS PER CODE STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
6. PROVIDE ALL WATER HEATERS WITH EXPANSION TANK SIZE, INSTALL AND SUPPORT AS PER MANUFACTURER'S RECOMMENDATIONS. SUPPORT INDEPENDENTLY FROM WATER PIPING. AMIROL AND WATTS ARE APPROVED.
9. PROVIDE AND INSTALL FULL SIZE P&T RELIEF DRAIN LINE. TERMINATE AT MOP SINK WITH TURN DOWN AND AIR CAP.

PLUMBING FIXTURE SPECIFICATIONS			
MARK	DESCRIPTION	MARK	DESCRIPTION
WC	WATER CLOSET: FIXTURE: KOHLER MODEL No. K-3998, 14-1/2" HIGH RIM, 1.28 GALLONS PER FLUSH, FLOOR MOUNTED, WHITE, VITREOUS CHINA, ELONGATED BOWL, SEAT: CHURCH 9500 WHITE OPEN FRONT SEAT WITH CONCEALED CHECK HINGE & WITHOUT COVER, SUPPLY: EASTMAN C5CR-20-LK, 1/2" x 3/8" ANGLE STOP WITH FLEXIBLE TUBE RISER.	MS	MOP SINK: FIXTURE: FIAT MODEL MSB-2424, 24" x 24" x 10", FLOOR MOUNTED, MOLDED STONE WITH INTEGRAL STAINLESS STEEL STRAINER EXTENSION, FAUCET: CHICAGO FAUCET 897 CHROME-PLATED SUPPLY FITTING WITH INTEGRAL STOPS, VACUUM BREAKER, 3/4" HOSE THREAD, FLEXIBLE 3/4" RUBBER HOSE AND HOSE BRACKET; MOP HANGER: SILICONE SEALANT INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. TRAP: PROVIDE 3" CAST IRON TRAP.
HWC	WATER CLOSET (ADA): FIXTURE: KOHLER MODEL No. K-3658, 17-1/4" HIGH RIM, 1.28 GALLONS PER FLUSH, FLOOR MOUNTED, VITREOUS CHINA, ELONGATED BOWL, SEAT: CHURCH 9500 WHITE OPEN FRONT SEAT WITH CONCEALED CHECK HINGE & WITHOUT COVER, SUPPLY: EASTMAN C5CR-20-LK, 1/2" x 3/8" ANGLE STOP WITH FLEXIBLE TUBE RISER, FLUSH CONTROL LOCATION TO COMPLY W/ ADA REQUIREMENTS.	EDF	ELECTRIC DRINKING FOUNTAIN (HIGH-LOW TYPE): FIXTURE: OASIS MODEL No. P8AVSL, WALL MOUNTED BARRIER FREE SPIT-LEVEL ELECTRIC WATER COOLER WITH CAPACITY OF 7.8 GPH AT 80° F AMBIENT AT 80° F INLET AND 50° F OUTLET, COMPRESSOR: 1/5 HP, 120 VOLT, HERMETICALLY SEALED WITH CAPACITOR AND OVERLOAD PROTECTION, COOLER MANUFACTURER SHALL PROVIDE A 5-YEAR, 100% REPLACEMENT WARRANTY ON THE COMPRESSOR, CONTROLS, TANK AND INTEGRAL PIPING, SUPPLY: EASTMAN C5CR-15-LK, 1/2" x 3/8" ANGLE STOP WITH FLEXIBLE TUBE RISER, TRAP: MCGUIRE 8902 1-1/4" x 1-1/2" CAST BRASS P-TRAP. REFER TO ARCHITECTURAL DRAWINGS FOR UNIT MOUNTING HEIGHTS. PROVIDE WITH OPTIONAL APRON.
UR	URINAL: KOHLER MODEL K-4960-ET WALL HUNG VITREOUS CHINA, ELONGATED RIM, COLOR SHALL BE WHITE, FLUSH VALVE: SLOAN ROYAL MODEL 18R-1, 1.0 GALLONS PER FLUSH, CARRIER: J.R. SMITH 637 (ZURN Z-1222, WADE W-452), MOUNT PER THE ARCHITECTURAL DRAWINGS. - MOUNT ADA URINAL AT ADA HEIGHT.	WH-1	ELECTRIC WATER HEATER: PROVIDE UL LISTED ELECTRIC WATER HEATER OF SIZE, CAPACITY AND MAKE AS SCHEDULED. HEATER SHALL BE WARRANTED FOR A MINIMUM OF 5 FULL YEARS AFTER FINAL ACCEPTANCE OF THE BUILDING, FURNISH HEATER WITH THE FOLLOWING ACCESSORIES: 1. ASME COMBINATION TEMPERATURE AND PRESSURE RELIEF VALVE IN EXCESS OF HEATER INPUT, RUN FULL SIZE DRAIN TO TERMINATE AS SHOWN ON DRAWINGS. 2. AUTOMATIC THERMOSTAT ACTUATED CONTROLS WITH 100% HIGH-LIMIT CONTROLS. 3. TANK DRAIN. 5. BRASS NIPPLES FOR PIPE CONNECTIONS. 6. HEATER SHALL BE FACTORY INSULATED AND SHEET METAL JACKETED.
LAV	LAVATORY: (COUNTERTOP OVAL, HANDICAP ACCESSIBLE): LAV INTEGRAL BY COUNTERTOP PROVIDER, WITH OVERFLOW, SINGLE HOLE. SUPPLY FITTING: CHICAGO FAUCETS MODEL 333-666, SINGLE TEMPERATURE METERING CENTERSET FAUCET WITH 0.5 GPM AERATOR, PUSH DOWN HANDLE; KOHLER MODEL K-13885 OFFSET GRID DRAIN ASSEMBLY. PROVIDE 1/2" x 3/8" ANGLE STOP SUPPLIES WITH FLEXIBLE TUBE RISER; PROVIDE OFFSET P-TRAP FOR HANDICAPPED ACCESS. INSULATE ALL EXPOSED WATER AND WASTE PIPING BELOW COUNTER WITH TRUEBRO "HAND- GUARD" INSULATION KIT, MODEL 102, WITH ACCESSORY #105. PROVIDE POWERS LF6480-10 LEAD FREE THERMOSTATIC LAV TEMPERING VALVE. SET OUTLET TEMP. NOT TO EXCEED 110 DEGREES F. (ASSE 1070).	HB1	HOSE BIBB: WOODFORD MODEL No. 65, NON-FREEZE TYPE, CHROME PLATED FINISH, 3/4" HOSE CONNECTION WITH INTEGRAL VACUUM BREAKER, LOOSE TEE KEY HANDLE. (OR APPROVED EQ.)
SK	SINK (2 COMPARTMENT): FIXTURE: SINK INTEGRAL BY COUNTERTOP PROVIDER, DOUBLE COMPARTMENT SINK WITH THREE-HOLE PUNCH. FAUCET: JUST J-900, SINGLE LEVER FAUCET WITH AERATOR, SUPPLIES: EASTMAN C5CR-20-LK, 1/2" x 3/8" ANGLE STOPS WITH FLEXIBLE TUBE RISERS. PROVIDE JUST J-35 BASKET STRAINERS WITH 1-1/2" TAILPIECE (2 REQUIRED), AND JUST J-535 1-1/2" TRAP ASSEMBLY.	HB2	HOSE BIBB: ACORN MODEL No. 8121-CR, CHROME PLATED FINISH, 3/4" HOSE CONNECTION WITH INTEGRAL VACUUM BREAKER, WHEEL HANDLE. (OR APPROVED EQ.)
GD	GARBAGE DISPOSAL: INSINKERATOR EVOLUTION ESSENTIAL FOOD WASTE DISPOSER WITH STAINLESS STEEL GRIND CHAMBER AND COMPONENTS. MANUAL RESET OVERLOAD PROTECTION, 3/4 HP MOTOR.	FD	FLOOR DRAINS: EQUAL TO J.R. SMITH 2005-A DUCO CAST IRON DRAIN BODY WITH 5" DIAMETER ADJUSTABLE NICKEL BRONZE STRAINER TRAP PRIMER CONNECTION AND NO-HUB OUTLET CONNECTION.

1. PLUMBING FIXTURES TO BE SELECTED/APPROVED BY OWNER/ARCHITECT. PRIOR TO ORDERING FIXTURES AND TRIM, SUBMIT OUT-SHEETS FOR ARCHITECTS/OWNERS APPROVAL.
2. DETERMINE EXACT LOCATION AND MOUNTING HEIGHT OF PLUMBING FIXTURES FROM ARCHITECTURAL DRAWINGS.
3. PROVIDE AND INSTALL ANY/ALL MANUF. RECOMMENDED ACCESSORIES, INCLUDING SHUT-OFF VALVES, P-TRAPS, DRAIN ASSEMBLIES, FLEXIBLE BRAIDED STAINLESS STEEL SUPPLIES, ETC.
4. INSTALL ALL FIXTURES AND ACCESSORIES AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
5. HOT WATER SHALL BE THE LEFT FITTING ON ALL FAUCETS.
6. CONTR. TO VERIFY ALL FAUCETS ARE COMPATIBLE WITH THE FIXTURE PRIOR TO ORDERING OR PURCHASING. THIS INCLUDES SIZE, SPREAD, NO. OF HOLES, ETC.
7. ALL FLOOR SINKS MUST BE MIN. 50% EXPOSED.
8. PROVIDE TRAP PRIMER ON ALL FLOOR DRAINS AND FLOOR SINKS.
9. PROVIDE ALL HOSE BIBBS AND HOSE END FITTINGS WITH VACUUM BREAKER.
10. PROVIDE AND INSTALL NEW WATER HAMMER ARRESTER, "JAY R. SMITH" PDI (TYPE AND FIGURE AS REQUIRED) WITH BALL VALVE, IN WALL WITH ACCESS DOOR; AS REQUIRED FOR CLOTHES WASHER, DISHWASHER, FLUSH VALVES, , AND OTHER QUICK CLOSING VALVES. SIZE SHALL BE BASED ON PDI STANDARD WH-201; AND A117.26; ASSE 1010.
11. ALL PUBLIC WATER CLOSETS ARE TO BE ELONGATED BOWL WITH OPEN FRONT SEAT
12. PROVIDE POWERS LF6840-10 LEAD FREE THERMOSTATIC LAV TEMPERING VALVE SET OUTLET TEMP NOT TO EXCEED 110 DEGREES F. (ASSE 1070)
13. ALL HANDICAPPED FIXTURES MUST MEET THE AMERICANS WITH DISABILITIES ACT (A.D.A.) GUIDELINES AND ANSI A117.1 REQUIREMENTS FOR THE PHYSICALLY CHALLENGED.
14. WATER AND DRAIN PIPES UNDER ADA LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES AND SINKS.
15. OPTIONAL APRON TO BE PROVIDED AND INSTALLED UNDER UPPER UNIT OF ADA HIGH-LOW DRINKING FOUNTAIN.
16. PROVIDE ALL ADA LAVATORY AND SINK FAUCETS WITH WRIST BLADE HANDLES.
17. WC FLUSH CONTROLS MUST BE PLACED ON THE SIDE OF THE TOILET WITH THE MOST CLEAR FLOOR SPACE AND MOUNTED NO HIGHER THAN 44" ABOVE THE FINISHED FLOOR.

FIXTURE CONNECTION SCHEDULE						
MARK	DESCRIPTION	WASTE	VENT	COLD WATER	HOT WATER	REMARKS
HWC	WATER CLOSET - ADA	3"	2"	1/2"	-	TANK TYPE
WC	WATER CLOSET	3"	2"	1/2"	-	TANK TYPE
UR	URINAL	2"	1-1/2"	1/2"	-	
LAV	LAVATORY	2"	1-1/2"	1/2"	1/2"	COUNTER TOP
SK	SINK	2"	1-1/2"	1/2"	1/2"	DUAL COMPARTMENT WITH DISPOSAL
MS	MOP SINK	3"	1-1/2"	1/2"	1/2"	
EDF	ELECT. DRINK'G FNT.	1-1/2"	1-1/2"	1/2"	-	ADA BI-LEVEL
HB	HOSE BIBB	-	-	3/4"	-	NON-FREEZE TYPE
FD	FLOOR DRAIN	2"	1-1/2"	-	-	WITH TRAP PRIMER

TOTAL NUMBER OF WATER SUPPLY FU

TYPE OF FIXTURE	QTY	x	FIXTURE UNIT VALUE	=	TOTAL FIXTURE UNITS
WATER CLOSET	3		5		15
URINAL	2		5		10
LAVATORY	4		2		8
SINK	1		4		4
MOP SINK	1		3		3
ELECTRIC DRINKING FOUNTAIN	1		0.5		1
HOSE BIBB (USE ONLY 2)	2		5		10
TOTAL FU =					51

WATER CALCULATION:

46 FIXTURE UNITS = 28 GALLONS PER MINUTE (GPM)
(PREDOMINANTLY FLUSH TANK)

PIPE LENGTH TAP TO METER	10 FT.
PIPE LENGTH METER TO LAST FIXTURE	175 FT.
VERTICAL PIPE LENGTH TO HIGHEST FIXTURE	10 FT.
TOTAL PIPE LENGTH	195 FT.
FITTING LOSS (15%)	29 FT.
TOTAL DEVELOPED LENGTH	224 FT.

WATER PIPE SIZING CRITERIA

STREET PRESSURE	60.00 PSI
WATER METER LOSS (1")	-10.00 PSI
BACKFLOW PREVENTER LOSS (1")	-10.00 PSI
STATIC LOSS (10' x 0.43)	-4.30 PSI
FIXTURE LOSS	-20.00 PSI
PRESSURE AVAILABLE FOR PIPING	15.70 PSI

15.70 PSI / 224 FEET x 100 = 7.0 PSI MAXIMUM ALLOWABLE DROP PER 100 FEET PIPE LENGTH

*ASSUMED WATER PRESSURE- CONTRACTOR SHALL VERIFY ACTUAL WATER PRESSURE PRIOR TO SUBMITTING BID/CONSTRUCTION. IF PRESSURE IS LESS THAN 50 PSI, CONTRACTOR SHALL CONTACT ENGINEER FOR PIPE SIZING EVALUATION. IF PRESSURE EXCEEDS 80 PSI, A PRESSURE REDUCING VALVE SHALL BE PROVIDED. PIPING VELOCITY NOT TO EXCEED 8 FEET PER SECOND.

MIN. 1" WATER METER SIZE REQUIRED. COORDINATE WITH CIVIL ENGINEER.
MIN. 1-1/2" BUILDING SUPPLY REQUIRED. COORDINATE WITH CIVIL ENGINEER.

WATER PIPE SIZING CHART

PIPE SIZE	GPM	FU TANK
1/2"	0-3	0-2
3/4"	4-8	3-9
1"	9-16	10-23
1 1/4"	17-28	24-50
1 1/2"	29-44	51-104

PIPE SIZING BASED ON 7.0 PSI/100 FT.

CONSTRUCTION CODES

2018 IBC
2018 IFGC
2018 IECC
2018 IMC
2018 IPC

ALL CONST. SHALL COMPLY WITH THE FOLLOWING CODES AS AMENDED.

GAS PIPING NOTES:

1. MINIMUM DEPTH OF GAS PIPING TO BE 18" BELOW GRADE.
2. GAS PIPING SHALL NOT BE INSTALLED IN OR ON THE GROUND UNDER ANY BUILDING.
3. GAS PIPING SHALL NOT RUN IN HOLLOW CORE OF BLOCK.
4. PROVIDE SHUT-OFF COCK, UNION AND 6" LONG DIRT LEG WITH CAP AT EACH GAS LINE DROP TO APPLIANCE. DIRT LEG SHALL BE LOCATED DOWNSTREAM OF THE SHUT-OFF COCK.
5. ALL GAS USING EQUIPMENT TO BE NATURAL FUEL. VERIFY IN FIELD FOR AVAILABILITY OF NATURE GAS.
6. DO NOT USE FLEXIBLE PIPE CONNECTIONS TO EQUIPMENT.
7. ALL GAS PIPING UNDER ASPHALT OR CONCRETE PAVING ADJOINING BUILDING MUST BE SLEEVED IN GAS TIGHT PIPE (SCHEDULE 40 PVC PIPE). SLEEVE SIZE SHALL (MINIMUM) 2 PIPE SIZES LARGER THAN THE GAS PIPE.
8. VERIFY ALL GAS BTU/H INPUTS WITH ACTUAL BTU/H INPUT OF APPLIANCE SUPPLIED.
9. COORDINATE EXACT SIZE, LOCATION, INSTALLATION REQUIREMENTS, ETC., WITH GAS USING APPLIANCE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
10. CONTRACTOR TO COORDINATE GAS SHUTOFF VALVE LOCATIONS AT EACH GAS USING APPLIANCE WITH ARCHITECT PRIOR TO INSTALLATION.
11. ALL GAS LINES INSTALLED THROUGH CMU WALLS, ETC, SHALL BE SLEEVED WITH STEEL PIPE A MINIMUM OF (2) (TWO) PIPE SIZES LARGER THAN THE GAS PIPE.
12. EXTERIOR GAS PIPING SHALL RECEIVE ONE COAT EACH OF A RUST AND WEATHER RESISTANT PRIMER AND TOP COAT. COORDINATE WITH ARCHITECT FOR COLOR. MATERIAL.
13. APPLIANCE CONNECTIONS SHALL, AT NO TIME, HAVE A DIAMETER LESS THAN THAT OF THE INLET CONNECTION TO THE APPLIANCE AS PROVIDED BY THE MANUFACTURER AND EACH APPLIANCE SHALL BE RIDGIDLY CONNECTED TO THE GAS PIPING WITH MATERIALS AS PROVIDED IN THE 2018 IFGC.
14. COORDINATE GAS METER, SIZE, LOCATION, ACCESSORIES, INSTALLATION REQUIREMENTS, ETC., WITH LOCAL A.G.C.O.
15. ALL GAS PIPING, MATERIALS, VALVES, FITTINGS, INSTALLATION AND TESTING SHALL COMPLY WITH CHAP. 4, 2018 INTERNATIONAL FUEL GAS CODE.

ENERGY COMPLIANCE PER 2018 IECC

HEAT TRAPS:
NOT REQUIRED WITH A HOT WATER RECIRC SYSTEM OR TANKLESS SYSTEM.

WATER HEATERS NOT SUPPLIED WITH INTEGRAL HEAT TRAPS AND SERVING NON-CIRCULATING SYSTEMS SHALL BE PROVIDED WITH HEAT TRAPS ON THE SUPPLY AND DISCHARGE PIPING ASSOCIATED WITH THE EQUIPMENT. REFERENCE WATER HEATER SCHEDULE.
NOTE: HOT WATER LINE DOES NOT EXCEED 90 FT. IN TOTAL DEVELOPED LENGTH, THEREFORE, HOT WATER RECIRC. LINE/PUMP IS NOT REQUIRED.

AUTOMATIC SHUTOFF:
THE CONTROLS SHALL AUTOMATICALLY TURN OFF THE PUMP WHEN THE WATER IN THE CIRCULATION LOOP IS AT THE DESIRED TEMPERATURE AND WHEN THERE IS NO DEMAND FOR HOT WATER.

TEMPERATURE CONTROLS:
THE CONTROL SHALL LIMIT THE TEMPERATURE OF THE WATER ENTERING THE COLD-WATER PIPING TO 104°F.

HOT WATER RECIRC SYSTEM CONTROLS:
AUTOMATIC CIRCULATION SYSTEM SHALL BE ARRANGED TO TURN OFF WHEN HOT WATER SYSTEM IS NOT IN USE.

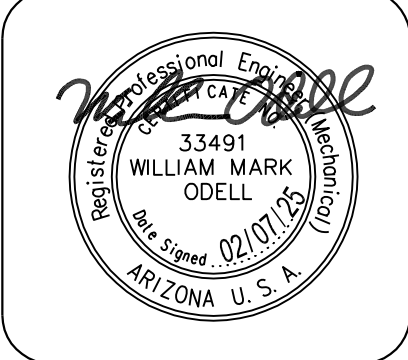
PIPING INSULATION:
THE PIPING INSULATION CALLED OUT FOR IN THE PLUMBING SPECIFICATIONS MEETS OR EXCEEDS THE VALUES REQUIRED PER IECC C404.4. FOR AUTOMATIC-CIRCULATING HOT WATER SYSTEMS, THE FIRST 8 FT OF COLD WATER AND ALL HOT WATER PIPING 1-1/2" AND LESS SHALL BE INSULATED WITH MIN. 1" INSULATION, AND PIPING GREATER THAN 1-1/2" SHALL BE INSULATED WITH MIN. 1-1/2" INSULATION.

PLUMBING LEGEND		
SYMBOL	ABBR.	DISCIPTION
	W	DRAIN OR WASTE PIPING
	V	VENT PIPING
	CW	COLD WATER PIPING
	HW	HOT WATER PIPING
	HWR	HOT WATER RETURN PIPING
	G	NATURAL GAS PIPING
	BV	BALL VALVE (FULL PORT)
	FCO	FLOOR CLEANOUT
	SCO	SURFACE CLEANOUT
	WCO	WALL CLEANOUT
	VTR	VENT THRU ROOF
	HB	HOSE BIBB (NON FREEZE)
	U.N.O.	UNLESS NOTED OTHERWISE
	-	CONNECT NEW PIPE TO EXISTING

- NOT ALL SYMBOLS MAY APPLY.
- MATCH BUILDING STANDARDS WHERE APPLICABLE.
- FIELD VERIFY EXISTING ITEMS AND REPAIR OR REPLACE AS NECESSARY.
- FIELD VERIFY EXACT SIZE, LOCATION, MATERIAL, DEPTH, DIRECTION OF FLOW, ETC. OF ALL EXISTING PIPING.
- BID PER VERIFIED CONDITIONS.

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C. and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P.O. Box 11593
Prescott, AZ 86304

P 928-443-5812
F 928-443-5815

email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Plumbing Schedules

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY
CHECKED BY
DATE November 12th, 2024
JOB NO. 803
SHEET

P1.3



11759 N. 143rd Ave.- Surprise, AZ 85379 Project #24075
(823) 444-6143

1. GENERAL

1.1 SCOPE: WORK UNDER THIS SECTION INCLUDES COORDINATING AND FURNISHING ALL LABOR AND MATERIAL NECESSARY TO INSTALL A COMPLETE PLUMBING SYSTEM AS SHOWN AND SPECIFIED AND IN ACCORDANCE WITH THE CODES. CONTRACTOR SHALL PAY FOR ALL PERMITS, METERS, FEES, CITY INSPECTIONS, LEGAL NOTICES, ETC., AS REQUIRED.

1.1.2 CONTRACTOR MUST EXAMINE THE CONTRACT DRAWINGS AND ALL AVAILABLE INFORMATION CONCERNING EXISTING INSTALLATION, STRUCTURE, AND LOCAL CONDITIONS, VISIT THE SITE PRIOR TO BID TO UNDERSTAND THE NATURE AND SCOPE OF ALL WORK TO BE PERFORMED AND VERIFY EXISTING CONDITIONS. CONTRACTOR SHALL NOTIFY ARCHITECT IN WRITING OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS. THE SUBMISSION OF A BID WILL BE TAKEN AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE AND THAT ALL EXISTING CONDITIONS HAVE BEEN CONSIDERED, AND NO ADDITIONAL SERVICE FEES SHALL BE GRANTED FOR THE FAILURE TO PERFORM THIS WORK. ITEMS TO BE VERIFIED MAY INCLUDE, BUT NOT LIMITED TO THE FOLLOWING:

1. SIZE AND LOCATION OF ALL EXISTING PIPING IN THE SCOPE OF WORK. THIS INCLUDES, BUT NOT LIMITED TO: COLD WATER MAIN SIZES, SEWER INVERT DEPTH, SEWER AND WATER SERVICE SIZE AND ENTRANCE LOCATIONS.
2. SPECIFIC CONDITION AND LOCATION OF ALL PLUMBING FIXTURES UNDER THIS SCOPE OF WORK. ANY REPAIRS NEEDED TO EXISTING EQUIPMENT SHALL BE RELAYED TO OWNER FOR REPAIR/REPLACEMENT.

NOTIFY ENGINEER IF ANY DISCREPANCIES OR CONFLICTS ARE OBSERVED. THE EXISTING PLUMBING EQUIPMENT AND PIPING SHOWN IN THESE DRAWINGS ARE FOR REFERENCE ONLY, THEREFORE IT IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO VERIFY THESE CONDITIONS AND TAKE THEM IN TO ACCOUNT IN THEIR BID.

1.2 SUBMITTALS: WITHIN 15 DAYS AFTER AWARD OF CONTRACT, SUBMIT 8 COPIES OF ALL ITEMS. SHOP DRAWINGS ARE NOT A FORUM FOR CHANGES IN PROJECT SCOPE OR REQUIREMENTS.

PRIOR TO SUBMISSION OF SHOP DRAWINGS TO ARCHITECT, CONTRACTOR SHALL REVIEW SUBMITTALS AND BE SATISFIED THAT THEY ARE REPRESENTATIVE AND DESCRIPTIVE OF THE EQUIPMENT AND MATERIAL TO WHICH THEY PERTAIN. ALL SUBMITTED EQUIPMENT WILL BE CHECKED BY THE CONTRACTOR TO MAKE CERTAIN THE EQUIPMENT WILL PROPERLY FIT THE SPACE ALLOCATED.

1.3 RECORD DRAWINGS: PROVIDE A SET TO THE ARCHITECT AT COMPLETION OF PROJECT. DRAWINGS SHALL BE LEGIBLY MARKED IN RED PENCIL TO SHOW ALL CHANGES AND DEPARTURES OF THE INSTALLATION AS COMPARED WITH THE ORIGINAL DESIGN.

1.4 INSTRUCTIONS: PROVIDE MAINTENANCE MANUAL AND INSTRUCT OWNER IN THE PROPER OPERATION AND MAINTENANCE OF THE EQUIPMENT.

1.5 GUARANTEE: ONE YEAR ON LABOR, MATERIAL, AND EQUIPMENT.

1.6 COORDINATION: CONTRACTOR SHALL COORDINATE AND VERIFY WITH UTILITY COMPANIES, THE SIZE, LOCATION, TYPE, ETC. OF ALL EXISTING METERS, BFPD, MAINS AND TAPS AS REQUIRED TO ENSURE THEY ARE OF SUFFICIENT SIZE AND CAPACITY TO HANDLE NEW DEMAND. CONTRACTOR MAY BE REQUIRED TO RESIZE SERVICE LINES, METER, BFPD, AND TAP AS REQUIRED TO ACCEPT TOTAL NEW DEMAND, IF APPLICABLE.

1.7 DESIGN DRAWINGS: DESIGN DRAWINGS ARE DIAGRAMMATIC AND ONLY DEFINE BASIC FUNCTIONS REQUIRED. PROVIDE ALL WORK, MATERIAL, ETC., TO ACCOMPLISH THESE REQUIREMENTS. MINOR DEVIATIONS FROM DESIGN LAYOUT ARE ANTICIPATED AND ARE A PART OF WORK INCLUDED, HOWEVER, MAKE NO CHANGES THAT ALTER CHARACTER OF WORK. DO NOT SCALE DESIGN DRAWINGS.

1.8 REGULATIONS IN EFFECT: NATIONAL, STATE, AND CITY CODES, ORDINANCES, ETC., HAVING JURISDICTION. RULES AND REQUIREMENTS OF UTILITY SERVING AGENCIES. NO ADDITIONAL FUNDS WILL BE ALLOCATED FOR WORK REQUIRED TO CONFORM TO REGULATIONS AND REQUIREMENTS.

1.10 QUALIFICATIONS OF WORKMEN: USE SUFFICIENT JOURNEYMEN CRAFTSMEN AND COMPETENT SUPERVISORS, TO ENSURE PROMPT, PROPER, AND SAFE EXECUTION OF WORK.

2. PRODUCTS

2.1 PIPING:

2.1.1 WATER LINES:

2.1.1.1 COPPER: TYPE "L" HARD DRAWN, CONFORMING TO ASTM B88, FOR ALL WATER PIPE NOT SET UNDER CONCRETE OR IN THE GROUND.

2.1.1.2 COPPER: TYPE "K" SOFT DRAWN, CONFORMING TO ASTM B88, FOR WATER PIPE SET IN OR UNDER CONCRETE OR IN THE GROUND. WRAP LINES BELOW CONCRETE FLOORS WITH 20 MILS OF POLYKON TAPE.

2.1.1.3 FITTINGS: WROUGHT COPPER CONFORMING TO ANSI B16.22.

2.1.1.4 PLASTIC: IF PERMITTED BY ADMINISTRATIVE AUTHORITY, IAPMO APPROVED, NSF-61 LISTED, CROSSLINKED POLYETHYLENE (PEX) TUBING, EQUAL TO WIRSBO "AQUAPEX" SYSTEM IS ACCEPTABLE FOR POTABLE WATER PIPING.

2.1.2 SANITARY WASTE AND VENT LINES:

2.1.2.1 CAST IRON CONFORMING TO CISPI STANDARD 301-95 AND ASTM A-888 FOR ALL NO-HUB PIPE AND FITTINGS INSTALLED ABOVE AND BELOW GRADE.

2.1.2.2 GALVANIZED IRON: STANDARD WEIGHT, SCHEDULE 40 GALVANIZED IRON CONFORMING TO ASTM A-120 FOR ALL VENT LINES 2-1/2" OR SMALLER.

2.1.2.3 FITTINGS (WASTE AND VENT SYSTEM, NO-HUB CAST IRON): NO-HUB CAST IRON DRAINAGE PATTERN FITTINGS CONFORMING TO CISPI #301-95.

2.1.2.4 FITTINGS (WASTE AND VENT, GALVANIZED STEEL): THREADED CAST IRON FITTINGS CONFORMING TO ANSI B16.4.

2.1.2.5 COUPLINGS (WASTE AND VENT, ABOVE AND BELOW GRADE): DOUBLE BAND, STAINLESS STEEL COUPLINGS CONFORMING TO CISPI 310-95, WITH NEOPRENE GASKET CONFORMING TO ASTM STANDARD C564 (NOTE: SCREENED STAINLESS SHIELD IS NOT APPROVED).

2.1.2.6 PLASTIC: SUBJECT TO OWNER APPROVAL, PVC PIPING CONFORMING TO ASTM D-2665-88 IS ACCEPTABLE FOR SANITARY WASTE PIPING INSTALLED BELOW GRADE OR SLAB PR UPPER FLOOR. FITTINGS: DRAINAGE FITTINGS TO MATCH PIPE.

2.1.2.7 HORIZONTAL DRAINAGE PIPING SHALL BE INSTALLED IN UNIFORM ALIGNMENT AT UNIFORM SLOPES; NOT LESS THAN 1/4"(25%) FOR PIPE SIZE 2.5 OR LESS AND DRAINAGE PIPING UPSTREAM OF A GREASE INTERCEPTOR, 1/8" (12.5%) FOR 3" TO 6", AND 1/16" (6.25%) FOR 8" OR GREATER AS REQUIRED BY IPC 704.1.

2.1.3 GAS PIPING:

2.1.3.1 GAS PIPING, INTERIOR ABOVE SLAB: SCHEDULE 40 BLACK STEEL CONFORMING TO ASTM A53. FITTINGS SHALL CONFORM TO THE FOLLOWING:

2.1.3.1.1 PIPE 2" AND SMALLER: 150 PSI, BLACK MALLEABLE IRON, CONFORMING TO ANSI B16.3, 150 PSI SWP.

2.1.3.1.2 PIPE 2-1/2" AND LARGER: BLACK STEEL SEAMLESS WELDING FITTINGS CONFORMING TO ANSI B16.9 AND USAS B16.25, 150 PSI SWP.

2.1.3.1.3 UNIONS: BLACK MALLEABLE IRON SCREWED CONNECTIONS, GROUND IRON-TO-BRONZE SEAT, CONFORMING TO ASTM A47, 250 PSI SWP.

2.1.3.1.4 FLANGES: BLACK FORGED STEEL WITH WELD NECK FLANGES CONFORMING TO ANSI B16.5, 150 PSI SWP.

2.1.3.2 GAS PIPING, ABOVE GRADE OR SLAB, EXTERIOR: SCHEDULE 40 GALVANIZED STEEL, CONFORMING TO ASTM A53. FITTINGS: 150# GALVANIZED STEEL SCORED FITTINGS.

2.1.3.3 GAS PIPING, BELOW GRADE OR SLAB: POLYETHYLENE (PE) PIPE, CONFORMING TO ASTM D2513, WITH HEAT FUSED JOINTS. INSTALLED IN ACCORDANCE WITH IAPMO IS 12-83. ALL PIPING INSTALLED BELOW SLAB SHALL BE PROPERLY SLEEVED AND VENTED. VERIFIED PROPOSED INSTALLATION IS ACCEPTABLE TO AUTHORITY HAVING JURISDICTION PRIOR TO CONSTRUCTION.

2.1.3.4 RISERS: ALL RISERS IN THE SYSTEM FROM BELOW GRADE SHALL BE PRE-MANUFACTURED ANODELESS TYPE AS MANUFACTURED BY CENTRAL MANUFACTURING CO., SHAWNEE, OK, OR APPROVED EQUAL.

2.1.4 TRACER WIRE: PROVIDE APPROVED 14 GAGE COPPER (ORANGE COVERED) TRACER WIRE ALONG ALL NON METALLIC UNDERGROUND PIPING.

2.2 PIPE HANGERS AND SUPPORTS: FEE & MASON FIGURE 103 CLEVIS HANGER FOR INSULATED PIPE AND FIGURE 104 CLEVIS HANGER FOR CAST IRON PIPE. INSTALL #500 TRISOLATORS ON UNSULATED COPPER LINES AT ALL HANGERS AND WALL PENETRATIONS.

2.3 PIPE INSULATION: USE FIBERGLASS PREMOLDED INSULATION WITH ALL-SERVICE JACKET, MINIMUM DENSITY OF 3.5 PCF. PROVIDE AN ADDITIONAL 8-OUNCE CANVAS JACKET WITH ARABOL FINISH AROUND ALL EXPOSED PIPE INSULATION, COVER FITTINGS AND VALVES (EXCEPT UNIONS) WITH INSULATION CEMENT WORKED ON IN TWO 2". APPLICATIONS TO A SMOOTH, HARD SURFACE, FLUSH WITH PIPE COVERING. PROVIDE 8" LONG, 20 GAUGE, GALVANIZED IRON METAL INSULATION GUARDS AT LOCATIONS OF HANGER RODS AND SUPPORTS. PROVIDE 12" LONG RIGID INSULATION BLOCKS ON BOTTOM HALF OF PIPE 1" AND LARGER AT HANGERS. INSULATION WALL THICKNESS SHALL CONFORM TO THE FOLLOWING SCHEDULE: DOMESTIC HOT WATER, HOT WATER RECIRCULATING LINES: MAINS AND HORIZONTAL BRANCHES - 1" THICKNESS. DROPS IN WALLS AND PARTITIONS - 1/2" THICKNESS.

PROVIDE MINIMUM R-3 INSULATION ON HOT WATER PIPES.

(105F-140F) DOMESTIC HOT WATER PIPING LESS THAN 1-1/2" TO REQUIRE A MINIMUM OF 1" INSULATION, HOT WATER PIPING 1-1/2" AND GREATER TO REQUIRE A MINIMUM OF 1-1/2" INSULATION. PIPE INSULATION TO COMPLY WITH 2018 IECC, TABLE C403.2.10

2.4 VALVES:

2.4.1 GATE VALVES: MILWAUKEE 115, 125#, BRONZE BODY, SOLDER TYPE GATE VALVE WITH NON RISING STEM FOR ALL LINES UP THROUGH 3" SIZE.

2.4.1.2 BALL VALVES: STOCKHAM S-216-BR-RS FOR ALL VALVES UP TO 2" IN DIAMETER, WITH SOLDER END JOINTS WITH EXTENDED SOLDER CUPS SHALL BE 600 PSI CWP, CAST BRASS BODY, REPLACEABLE TEFLON SEATS, CONVENTIONAL PORT, BLOWOUT-PROOF STEMS, AND CHROME-PLATED BRASS BALL.

2.4.2 CHECK VALVES: MILWAUKEE #1509, 125#, BRONZE BODY, SOLDER JOINT CHECK VALVE WITH HORIZONTAL BRONZE DISC FOR ALL VALVES UP TO 2" SIZE. MILWAUKEE #2974, 125#, IRON BODY, BRONZE TRIMMED, FLANGED HORIZONTAL CHECK VALVE FOR ALL VALVES LARGER THAN 2" SIZE.

2.4.3 SHUTOFF VALVE: MILWAUKEE BB1-350 BRONZE BODY, SOLDER JOINT VALVE FOR ALL LINES UP THROUGH 2"

2.4.3.2 ACORN #8160 HOSE BIBB NON-FREEZE INTEGRAL VACUUM BREAKER DUAL CHECK HYDRANT RECESSED HOSE BOX WITH DOOR. (OR APPROVED EQ.)

2.4.4 GAS VALVES, 3/4" AND SMALLER: MILWAUKEE BB-1-102.

2.4.5 GAS VALVES, 1" TO 1-1/2": ROCKWELL-NORDSTROM #142 WITH #555 LUBRICANT FOR NATURAL GAS SERVICE.

2.4.6 GAS VALVES, 2" AND LARGER: ROCKWELL-NORDSTROM #143 WITH #555 LUBRICANT FOR NATURAL GAS SERVICE.

2.4.7 GAS PRESSURE REGULATORS: MAXITROL 1325 SERIES, DIAPHRAGM ACTUATED PRESSURE REGULATOR SUITABLE FOR NATURAL GAS SERVICE. ORIFICE TO BE SIZED TO REGULATE CUBIC FEET PER HOUR AT INLET AND OUTLET PRESSURES AS SCHEDULED ON THE DRAWINGS OR AS REQUIRED BY SYSTEM.

2.5 CLEANOUTS:

2.5.1 CONCRETE AND TILE FLOORS: J.R. SMITH 4023, WITH SCORIATED NICKEL-BRONZE TOP.

2.5.2 CLEANOUTS (EXPOSED VERTICAL PIPING): J.R. SMITH 4512 CAST IRON BRANCH CLEANOUT TEE WITH BRONZE PLUG.

2.5.3 INTERIOR FINISHED WALLS: J.R. SMITH 4532.

2.5.4 EXTERIOR SURFACE CLEANOUTS: J.R. SMITH 4253. PROVIDE 18" X 18" X 6" CONCRETE PAD AT LANDSCAPE AREAS; PROVIDE CONCRETE RING BELOW GRADE AT ASPHALT AREAS.

2.5.5 PROVIDE ALL CLEANOUTS WITH HEAVY THREADED BRONZE PLUGS.

2.5.6 PROVIDE CLEANOUTS IN HORIZONTAL DRAINAGE PIPING. PROVIDE APPROPRIATE WALL OR FLOOR COVERS FOR CLEANED PIPES IN CONCRETE. PROVIDE CLEANOUTS IN OUTDOOR PIPING TO GRADE AND SECURE WITH TRAFFIC WEIGHT CLEANOUT BOX AND COVER. ALL CLEANOUTS SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH LATEST EDITION OF THE APPROVED PLUMBING CODE. ALL CLEANOUTS SHALL BE SAME SIZE AS PIPE. EACH HORIZONTAL DRAINAGE PIPE SHALL BE PROVIDED WITH A CLEANOUT AT ITS UPPER TERMINAL, AND EACH RUN OF PIPING, THAT IS MORE THAN 100 FEET IN TOTAL DEVELOPED LENGTH, SHALL BE PROVIDED WITH A CLEANOUT FOR EACH 100 FEET, OR FRACTION THEREOF, IN LENGTH OF SUCH PIPING. AN ADDITIONAL CLEANOUT SHALL BE PROVIDED IN A DRAINAGE LINE FOR EACH AGGREGATE HORIZONTAL CHANGE IN DIRECTION EXCEEDING 135 DEGREES.

2.6 ACCEPTABLE MANUFACTURERS: THE FOLLOWING IS A LIST OF MANUFACTURERS WHOSE EQUIPMENT IS ACCEPTABLE AS TO MANUFACTURER, SUBJECT TO CONFORMANCE WITH ALL DRAWINGS, SPECIFICATIONS AND ADDENDA ITEMS:

PLUMBING FIXTURES: AMERICAN STANDARD, KOHLER, ELJER, ELECTRIC WATER COOLERS: OASIS, ELKAY, HALSEY TAYLOR. ELECTRIC/GAS WATER HEATERS: RHEEM, A. O. SMITH, AMERICAN. TANKLESS GAS WATER HEATERS: AO SMITH, RHEEM, RINNAI, NAVIEN. STAINLESS STEEL SINKS: KOHLER, JUST, ELKAY. MOP SINKS: FIAT, SWAN, MUSTIE. VALVES: CRANE, KENNEDY, STOCKHAM, GRINNELL, MILWAUKEE, WOLVERINE. P-TRAPS: CRANE, KOHLER, ELJER, FROST, MCGUIRE. SUPPLY FIXTURES: CHICAGO, AMERICAN STANDARD, ELJER, SPEAKMAN, KOHLER. SUPPLY STOPS: EASTMAN, KOHLER, ELJER, BRASSCRAFT, MCGUIRE. CLOSET SEATS: SPERZEL, OLSONITE, BENCKE, BEMIS. DRAINS AND CLEANOUTS: J. R. SMITH, ZURN, JOSAM, WADE, WESTERN. HANGERS: GRINNELL, FEE & MASON, ELCEN, KIN-LINE, F & S, B-LINE, MICHIGAN.

2.7 PLUMBING FIXTURES: USE POLISHED CHROME-PLATED, ADJUSTABLE BRASS P-TRAPS WITH WALL ESCUTCHEONS AT ALL EXPOSED LOCATIONS. USE POLISHED CHROME-PLATED FAUCETS WITH REMOVABLE TRIM, BRASS BODY AND BRASS HANDLES. FIXTURES AND SUPPLY FITTING SHALL BE OF ONE MANUFACTURER. PROVIDE DIAPHRAGM TYPE, POLISHED CHROME-PLATED FLUSH VALVES WITH INTEGRAL VACUUM BREAKERS AND SCREWDRIVER STOPS. PROVIDE FIXTURE STOPS OR VALVES AHEAD OF ALL EQUIPMENT OR FIXTURES. AFTER FIXTURES ARE SET IN PLACE AND SECURED TO WALLS, CAULK ALL AROUND BETWEEN FIXTURES AND WALL WITH EITHER DOW CORNING #780 OR G.E. CONSTRUCTION SEALANT WHITE SILICONE CAULKING COMPOUND. USE BRADED STAINLESS STEEL SUPPLY LINES AT ALL SINKS, LAVATORIES AND WATER CLOSETS. SEE PLUMBING FIXTURE SPECIFICATION SCHEDULE ON DRAWINGS FOR COMPLETE FIXTURE SPECIFICATION. NOTE: FIXTURES TO BE APPROVED BY ARCHITECT / OWNER.

2.8 DRAINS:

2.8.2 FLOOR DRAINS, AREA DRAINS, AND PLANTER DRAINS:

2.8.2.1 ED FLOOR DRAINS: EQUAL TO J.R. SMITH 2005-A DUCO CAST IRON DRAIN BODY WITH 5" DIAMETER ADJUSTABLE NICKEL BRONZE STRAINER TRAP PRIMER CONNECTION AND NO-HUB OUTLET CONNECTION.

2.8.2.3 FS FLOOR SINKS - EQUAL TO J.R. SMITH 3150-Y, 12-1/2" TOP, CAST IRON FLANGED RECEPTOR, WITH ACID RESISTANT COATED INTERIOR, ALUMINUM DOME BOTTOM STRAINER, SQUARE NICKEL BRONZE TOP WITH HALF GRATE; TRAP PRIMER CONNECTION WHERE INDICATED ON DRAWINGS.

2.9 PIPING ACCESSORIES:

2.9.1 WATER HAMMER ARRESTERS TO BE PROVIDED AS REQUIRED AT DISHWASHERS, CLOTHES WASTERS, FLUSH VALVES, ICE MAKER BOX, SOLENOID VALVES, AND OTHER QUICK CLOSING VALVES (IPC 604.9). WATER HAMMER ARRESTORS SHALL BE ZURN, MODEL NO. Z-1700 OR EQUAL AND SHALL BE INSTALLED WHERE INDICATED ON DRAWINGS OR AS REQUIRED. SIZE SHALL BE BASED ON PDI STANDARD WH-201; ANSI A112.26; ASSE 1010.

2.10 GENERAL: NEW AND UNUSED PRODUCTS OF ESTABLISHED AND REPUTABLE AMERICAN MANUFACTURERS. SIMILAR ITEMS SHALL BE OF SAME MANUFACTURER.

COMPLETE AND OPERABLE SYSTEMS. INCLUDE ANY AND ALL ACCESSORIES REQUIRED FOR PROPER OPERATION AS THOUGH SPECIFICALLY INDICATED. SUCH AS: FILTERS, CONDENSATE DRAINS WITH VENTED TRAPS, RELIEF VALVES, SERVICE VALVES AND STOPS, THERMOSTATS, LOW VOLTAGE WIRING, VIBRATION ISOLATORS, EXPANSION JOINTS, BALL VALVES, REGULATORS, UNIONS, BALANCING VALVES, TRAP PRIMERS, SHOCK ABSORBERS, THRUST BLOCKS, BFPD'S, CLEANOUTS AND ITEMS SPECIFICALLY RECOMMENDED BY MANUFACTURER.

ALL EQUIPMENT/FIXTURES, APPLIANCES, SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS. CLEARANCES SHALL BE PER CODE STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.

REFERENCE TO A MANUFACTURER'S PRODUCT IS TO ESTABLISH TYPE, QUALITY, AND PERFORMANCE REQUIRED. THESE QUALIFICATIONS ARE IN ADDITION TO REQUIREMENTS SHOWN ELSEWHERE.

PIPE MATERIAL AND INSTALLATION TO BE PER CODE AND AS PER PIPE MANUF. RECOMMENDATIONS. ABS AND PVC SHOULD NOT BE INSTALLED IN A PLENUM.

BACKFLOW PREVENTION DEVICE: ALL DEVICES, APPURTENANCES, APPLIANCES, ETC INTENDED TO SERVE SOME SPECIAL FUNCTION SUCH AS STERILIZATION, DISTILLATION, PROCESSING, COOLING FOR STORAGE OF ICE OR FOODS, AND THAT CONNECT TO EITHER THE WATER SUPPLY OR DRAINAGE SYSTEM SHALL BE PROVIDED WITH PROTECTION AGAINST BACKFLOW, FLOODING OR CONTAMINATION OF THE WATER SUPPLY SYSTEM AND STOPPAGE OF THE DRAIN. BACKFLOW PREVENTERS SHALL HAVE PROPER DRAIN AND ACCESSIBLE FOR MAINTENANCE.

3. EXECUTION

3.1 TESTS AND INSPECTIONS:

3.1.1 ALL WORK TO BE TESTED AND APPROVED BEFORE COVERING AS DIRECTED BY ARCHITECT. REMAKE ALL LEAKING JOINTS.

3.1.2 WATER SYSTEM: 125 PSI HYDROSTATIC PRESSURE HELD FOR FOUR HOURS.

3.1.3 SANITARY WASTE AND VENT SYSTEM: FILL WITH WATER TO HIGHEST POINT IN THE SYSTEM AND LET STAND WITHOUT LOSS FOR TWO HOURS.

3.1.4 GAS SYSTEM: HOLD AT 50 PSI PNEUMATIC FOR FOUR HOURS WITH NO PRESSURE LOSS.

3.1.8 STERILIZATION (DOMESTIC WATER SYSTEM): AFTER TESTS HAVE BEEN COMPLETED, THE ENTIRE DOMESTIC WATER DISTRIBUTION SYSTEM SHALL BE THOROUGHLY FLUSHED WITH WATER UNTIL ALL ENTRAINED DIRT AND MUD HAVE BEEN REMOVED, AND SHALL BE STERILIZED WITH SOLUTIONS OF EITHER LIQUID CHLORINE CONFORMING TO FEDERAL SPECIFICATION BB-B-120 OR HYPOCHLORITE CONFORMING TO FED. SPEC. Q-C-114, TYPE II, GRADE G, OR FED. SPEC. Q-S-602, GRADE A OR B. THE CHLORINATING MATERIAL SHALL PROVIDE A DOSAGE OF NOT LESS THAN 50 PARTS PER MILLION AND SHALL BE INTRODUCED INTO THE SYSTEM IN AN APPROVED MANNER, AND RETAINED IN THE SYSTEM FOR 8 HOURS BEFORE FLUSHING.

3.2 FLASHING, SLEEVES AND ESCUTCHEON PLATES:

3.2.1 FLASHING: SUPPLY FLASHING FOR ALL VENT PIPE AND OTHER TYPES OF PIPING THROUGH ROOF TO BE INSTALLED WITH ROOFING. FLASH VENTS WITH STONEMAN S1300-4 OR WITH SHEET LEAD WEIGHING NOT LESS THAN 4 POUNDS PER SQUARE FOOT OR EQUAL. EXTEND FLASHING INTO ROOFING AT LEAST 10" FROM VENT AND TURN FLASHING OVER AND DOWN INTO VENT OPENING.

3.2.2 SLEEVES: USE 20 GAUGE GALVANIZED STEEL SLEEVES AROUND PIPES PASSING THROUGH MASONRY WALLS AND CONCRETE SLABS.

3.2.3 ESCUTCHEON PLATES: INSTALL CAST BRASS SPLIT RING WITH SETSCREW AT ALL LOCATIONS WHERE EXPOSED PIPES PASS THROUGH WALLS, FLOORS AND/OR CEILINGS. PROVIDE POLISHED CHROME-PLATED ESCUTCHEONS IN FINISHED ROOMS, ALL OTHERS POLISHED BRASS.

3.2.4 UNDERGROUND WATER PIPING: BURY ALL UNDERGROUND WATER PIPING A MINIMUM OF 24" BELOW FINISHED GRADE. INSTALL COPPER LINES BELOW CONCRETE FLOORS SO THAT NO JOINTS OCCUR BELOW FLOOR AND WRAP WITH 20 MILS OF POLYETHYLENE TAPE WITH A MINIMUM OF 50 % OVERLAP.

3.3 ELECTRICAL: WIRING BY ELECTRICAL CONTRACTOR.

3.4 GENERAL: PERFORM ALL WORK IN BEST TRADE PRACTICE. ARRANGE FOR GREATEST PRACTICAL EASE OF OPERATION AND SERVICE. INSTALL SQUARELY WITH BUILDING LINES. PROVIDE RIGID, PERMANENT, LEVEL, BASES AND SUPPORTS. ELIMINATE VIBRATION AND RATTLING.

3.4.1 FOLLOW LOCAL CODES, THESE SPECIFICATIONS AND MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES.

3.4.2 COVER AND PROTECT ALL EQUIPMENT AND MATERIALS FROM WEATHER, THEFT, ETC.. PLUG OR CAP ALL OPEN ENDS OF INSTALLED PIPING AND DUCTWORK.

3.5 EXCAVATION AND BACKFILL: ACCURATELY GRADE BOTTOM OF TRENCHES TO PROVIDE UNIFORM CONTINUOUS BEARING AND SUPPORT FOR PIPE. BACKFILL IN SIX INCH (6") MECHANICALLY COMPACTED LAYERS, FREE OF ROCKS, WOOD, AND DEBRIS. JETTING IS NOT AN ACCEPTABLE MEANS OF COMPACTION.

3.5.1 ROUGH-IN AND FINAL CONNECTIONS: THE DRAWINGS INDICATE GENERAL ARRANGEMENTS ONLY. PROVIDE ROUGH-IN AND FINAL CONNECTIONS FOR FIXTURES AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S SUGGESTIONS AND PRODUCT REQUIREMENTS.

3.6 INSTALL EXPOSED PIPING CLOSE TO BUILDING CONSTRUCTION TO MINIMIZE INTRUSION INTO USABLE BUILDING SPACE. UTILIZE FITTINGS FOR ALL JOINTS, OFFSETS AND TURNS.

3.6.1 VERIFY DIMENSIONS AND REQUIREMENTS. BENDING OR OFFSETTING OF PIPING AND "COCKING" OF FITTINGS WILL NOT BE ACCEPTABLE.

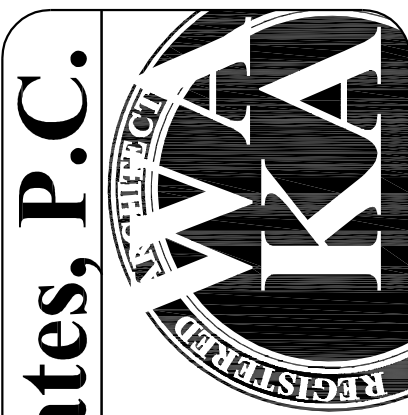
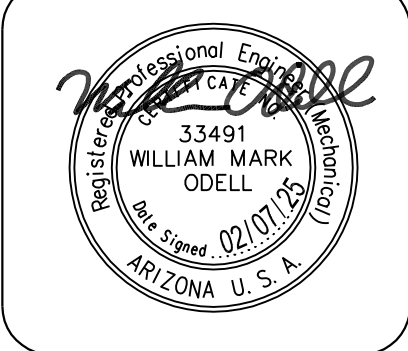
3.6.2 SUPPORT HORIZONTAL PIPING WITH PIPE HANGERS OR BRACKETS. DO NOT USE PERFORATED METAL TAPE. DO NOT SUPPORT PIPING FROM EQUIPMENT, HANGERS AND SUPPORTS. SUSPENDED PIPING SHALL BE SUPPORTED AT INTERVALS NOT TO EXCEED THOSE SHOWN IN LOCAL CODES. ALL PIPING SHALL BE SUPPORTED IN SUCH A MANNER AS TO MAINTAIN ITS ALIGNMENT, AND PREVENT SAGGING. PIPING IN THE GROUND SHALL BE LAID ON FIRM BED FOR ITS ENTIRE LENGTH. WHERE SUPPORT IS OTHERWISE PROVIDED, IT SHALL BE ACCEPTABLE TO THE ADMINISTRATIVE AUTHORITY. HANGERS AND ANCHORS SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT THE WEIGHT OF THE PIPE AND ITS CONTENTS. PIPING SHALL BE ISOLATED FROM INCOMPATIBLE MATERIALS. ALL PIPING, FIXTURES, APPLIANCES, AND APPURTENANCES SHALL BE ADEQUATELY SUPPORTED TO THE SATISFACTION OF THE ADMINISTRATIVE AUTHORITY. HANGER ROD SIZES SHALL BE NO SMALLER THAN THOSE SHOWN IN LOCAL CODES.

PLUMBING GENERAL NOTES:

1. ALL PLUMBING WORK SHALL COMPLY WITH THE MOST STRINGENT OF APPLICABLE CODES, ORDINANCES, OR THE SPECIFICATIONS.
2. ALL FIXTURES SHALL BE PROPERLY VENTED TO THE ATMOSPHERE.
3. COORDINATE LOCATION OF ALL PLUMBING LINES WITH DUCTWORK AND ELECTRICAL SERVICES.
4. WATER PIPING INSTALLED UNDER CONCRETE SLAB SHALL BE LOOPED IN PARTITION WALLS WITH NO JOINTS UNDER SLAB & WITH PLASTIC SLEEVE FOR EACH PENETRATION THROUGH SLAB.
5. ALL WATER PIPING TO BE CONTROLLED BY FULL FLOW BALL VALVE.
6. LOCATE ALL VENTS THROUGH ROOF 10'-0" FROM ALL AIR INTAKES, EVAPORATIVE COOLERS, ETC.
7. VERIFY INVERT ELEVATIONS (WASTE LINES), SIZES, & LOCATIONS OF ALL EXISTING GAS, WATER & WASTE LINES TO WHICH NEW PIPING CONNECTS PRIOR TO MAKING-UP OR INSTALLATION OF PIPING.
8. SLOPE ALL HORIZONTAL WASTE LINES AT 2% (MINIMUM) THROUGHOUT.
9. LOCATE ALL VALVES, UNIONS, THERMOMETERS, GAUGES, OR OTHER EQUIPMENT REQUIRING FREQUENT READING, REPAIR ADJUSTMENTS, INSPECTION, REMOVAL OR REPLACEMENT SO AS TO BE ACCESSIBLE WITH REFERENCE TO THE FINISHED BUILDING.
10. FULL WAY VALVE IS REQUIRED ON THE DISCHARGE SIDE OF EACH METER AND AT THE COLD WATER SUPPLY TO EACH WATER HEATER.
11. INSTALL APPROVED DIELECTRIC ISOLATORS AT ALL CONNECTIONS OF DISSIMILAR METALS.
12. REFER TO PLUMBING FIXTURE SCHEDULE FOR INDIVIDUAL LINE SIZES.
13. WHERE POSSIBLE, TIE VENTS TOGETHER SO THAT A MINIMUM NUMBER TERMINATE THROUGH ROOF.
14. PRIOR TO SUBMITTING BID, CONTRACTOR SHALL REVIEW THE ARCHITECTURAL DRAWINGS & INCLUDE HIS OWN AMOUNT TO FURNISH & INSTALL ANY FIXTURES SHOWN IN ADDITION TO PLUMBING DRAWINGS.
15. SOLDERS AND FLUX HAVING A LEAD CONTENT IN EXCESS OF TWO-TENTHS OF ONE PERCENT SHALL NOT BE USED IN THE INSTALLATION OR REPAIR OF PLUMBING PROVIDING WATER FOR HUMAN CONSUMPTION.
16. CONTRACTOR SHALL NOT CUT HOLES IN STRUCTURAL MEMBERS WITHOUT FIRST SECURING WRITTEN APPROVAL FROM THE ARCHITECT. IF SLAB IS POST TENSION IT MUST BE X-RAYED. AFTER REVIEW AND PERMISSION FROM THE STRUCTURAL ENGINEER, REVIEW AND APPROVAL MUST BE GRANTED BY THE BUILDING OWNER PRIOR TO CUTTING.
17. ROUGH-IN ALL WATER & WASTE PIPING TO SPECIAL EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS' SHOP DRAWINGS. VALVE ALL SUPPLIES AND MAKE FINAL CONNECTIONS.
18. INSTALL ALL HOSE BIBBS 12 INCHES ABOVE GRADE UNLESS OTHERWISE NOTED.
19. PROVIDE VACUUM BREAKERS ON HOSE BIBBS & ALL HOSE END FITTINGS.
20. DETERMINE EXACT LOCATION AND MOUNTING HEIGHT OF PLUMBING FIXTURES AND RELATED ITEMS (SUCH AS INTERCEPTORS, SUMP PUMPS, SEWAGE EJECTORS, WASHER BOX, ICE MAKER BOX, FLOOR DRAINS, WATER HEATERS, ACCESS DOORS, ETC.) FROM ARCHITECTURAL DRAWINGS.
21. PIPING OVER ELECTRICAL ROOMS OR PANELS SHALL BE AVOIDED WHERE POSSIBLE. WHEN PIPING IS NECESSARY IN THESE AREAS, PROVIDE LEAKAGE APPROVED PROTECTION.
22. ALL CLEANOUTS SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST EDITION OF THE IPC AND OTHER LOCAL CODES THAT APPLY, AND SHALL BE THE SAME SIZE AS THE PIPE.
- 23 - DRAINAGE PIPING SERVING FIXTURES HAVING FLOOD LEVEL RIMS BELOW THE ELEVATION OF THE NEXT UP-STREAM MANHOLE COVER OF THE PUBLIC SEWER SHALL BE PROTECTED FROM BACKFLOW OF SEWAGE BY INSTALLING AN APPROVED TYPE BACKWATER VALVE. FIXTURES ABOVE SUCH ELEVATIONS SHALL NOT DISCHARGE THROUGH THIS VALVE. - PLUMBING CONTRACTOR TO VERIFY THAT THE FINISH FLOOR ELEVATION IS A MINIMUM OF 1" ABOVE THE RIM ELEVATION OF THE UPSTREAM MANHOLE PRIOR TO ANY CONSTRUCTION TO ENSURE THAT BACKWATER VALVES ARE NOT REQUIRED.
- 24 - PIPING OVER FOOD PREPARATION, SERVING FOOD STORAGE AREAS AND ELECTRICAL ROOMS OR PANELS SHALL BE AVOIDED WHERE POSSIBLE. WHEN PIPING IS NECESSARY IN THESE AREAS, PROVIDE LEAKAGE APPROVED PROTECTION.
- 25 - INSTALL ALL EXTERIOR WATER LINES BELOW FROST LINE.
- 26 - WATER FOR FIXTURES AT EXTERIOR WALLS ARE TO RISE ALONG WALL INSIDE BUILDING, NOT IN WALL (TO PREVENT FREEZING) UNLESS WALLS ARE FURRED INTO THE BUILDING.
- 27 - ALL HOSE BIBBS ARE TO BE NON-FREEZE TYPE.

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.

P.O. Box 11593
Prescott, AZ 86304
P 928-443-5812
F 928-443-5815
email: wakaarchitect@gmail.com
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Plumbing Specifications

PROJECT:

European Techniques 7
6886 Inter Cal Way
Prescott, AZ

APN:

103-50-019

DRAWN BY
CHECKED BY
DATE November 12th, 2024
JOB NO. 803
SHEET

P1.4



11759 W. 143rd Ave. - Surprise, AZ 85379 Project #24075
(823) 444-6143

ELECTRICAL SYMBOLS

NOTE: NOT ALL SYMBOLS ARE USED ON THIS PROJECT

	FLUORESCENT FIXTURE, WITH FIXTURE DESIGNATED BY LETTER. SMALL LETTER INDICATES SWITCH LEG
	NIGHT LIGHT- NOT SWITCHED
	FLUORESCENT STRIP FIXTURE.
	CEILING OR WALLMOUNTED FIXTURE.
	PORCELAIN PULL CHAIN FIXTURE
	JUNCTION BOX
	JUNCTION BOX WITH FLEX CONNECTION.
	SINGLE FACE EXIT SIGN- NOT SWITCHED
	DOUBLE FACED EXIT SIGN- NOT SWITCHED.
	TWO HEAD EMERGENCY LIGHT WITH BATTERY.
	POLE-MOUNTED FIXTURE - No. OF LUMINAIRES AS SHOWN & SCHEDULED
	S SINGLE POLE SWITCH, + 48" A.F.F. (20A-120/277V)
	S ₃ THREE WAY SWITCH, + 48" A.F.F. (20A-120/277V)
	S ₄ 4-WAY SWITCH +48" AFF (20A-120/277V)
	S _P SWITCH AND PILOT LIGHT (20A-120-/277V)
	S _K SINGLE POLE SWITCH, KEY OPERATED (20A)
	DIMMER CONTROL, + 48" A.F.F. EQUAL TO LUTRON "NOVA" SERIES, SIZED TO MATCH LOAD SERVED
	VARIABLE SPEED FAN CONTROL, +48" A.F.F.
	DUPLEX RECEPTACLE, + 18" A.F.F. (20A)
	DUPLEX RECEPTACLE ABOVE COUNTER, VERIFY HEIGHT. (20A)
	FOURPLEX RECEPTACLE, + 18" A.F.F. (20A)
	SPECIAL RECEPTACLE - SIZE & TYPE AS NOTED
	POWER FLUSH FLOOR OUTLET
	TELEPHONE OUTLET PLASTER RING AT + 18" A.F.F. HUBBELL #P12 COVERPLATE. 3/4" C. TO CEILING SPACE UNLESS SHOWN WITH HOMERUNS.
	DATA SYSTEM OUTLET, 4" SQUARE BOX AND COVERPLATE, 3/4" C. TO CEILING SPACE UNLESS SHOWN WITH HOMERUN, + 18" A.F.F.
	TELE/DATA COMBO OUTLET, 4" SQUARE BOX AND COVERPLATE, 3/4" C. TO CEILING SPACE UNLESS SHOWN WITH HOMERUN, + 18" A.F.F.
	CABLE TELEVISION (CATV) OUTLET PLASTER RING AT + 18" A.F.F. U.N.O. HUBBELL COVERPLATE. 3/4" C. TO CEILING SPACE UNLESS SHOWN WITH HOMERUNS.
	TELEPHONE SYSTEM CONDUIT HOMERUN WITH NYLON PULLWIRE (1" MIN UNO)
	CLOSED CIRCUIT TV (CCTV) OUTLET SAME AS CATV OUTLET
	DOOR CHIME
	REMOTE CONTROL STATION +48" AFF
	DISCONNECT SWITCH, FUSE PER EQUIPMENT MANUFACTURERS RECOMMENDATION. OUTSIDE NEMA 3R - N.F. = NON-FUSED.
	COMBINATION STARTER AND FUSIBLE DISCONNECT SWITCH SIZE AS NOTED
	EQUIPMENT TERMINATION CONNECTION POINT VERIFY EXACT LOCATION LOAD AND VOLTAGE AS NOTED
	MOTOR
	THERMAL PROTECTED SWITCH
	MOTOR STARTER - SHADING INDICATES F.B.O.
	DISTRIBUTION PANELBOARD.
	BRANCH CIRCUIT PANELBOARD.
	CONDUIT BELOW FLOOR OR UNDERGROUND
	CONDUIT IN WALL OR ABOVE CEILING
	HOMERUN TO PANEL, NEUTRAL AND PHASE WIRING DESIGNATION (SEE GROUNDING NOTE)
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
	CONDUIT STUB-OUT, MARK AND CAP AS DIRECTED
	GROUND WIRE (SIZE AS NOTED) EXTENDED AND CONNECTED TO APP'D GROUND

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR (⌀ OF OUTLET)
A.F.G.	ABOVE FINISHED GRADE (⌀ OF OUTLET)
E.C.	EMPTY CONDUIT
G.F.I.	GROUND FAULT INTERRUPTER
WP	WEATHERPROOF
UNO	UNLESS OTHERWISE NOTED
NL	NIGHT LIGHT
TYP	TYPICAL
EDF	ELECTRIC DRINKING FOUNTAIN
TMB	TELEPHONE MOUNTING BOARD

SPECIFICATIONS

- PRIOR TO SUBMITTING BID, SUBCONTRACTORS SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL HAVE TO OPERATE AND WHICH IN ANY WAY AFFECTS THE WORK UNDER HIS CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.
- THE SUBCONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR THE PROPER RESTORATION OF ALL EXISTING SURFACES REQUIRING PATCHING, PLASTERING, PAINTING AND /OR OTHER REPAIR DUE TO THE INSTALLATION OF ELECTRICAL WORK UNDER THE TERMS OF THE CONTRACT. CLOSE ALL OPENINGS, REPAIR ALL SURFACES, ETC., AS REQUIRED.
- SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS AND BUILDING DETAILS. VERIFY LOCATION OF ALL OUTLETS, SWITCHES, AND WALL MOUNTED LIGHTING FIXTURES WITH ARCHITECTURAL DRAWINGS AND ACTUAL CONDITIONS. VERIFY ALL CEILING TYPES WITH ARCHITECTURAL DRAWINGS BEFORE ORDERING FIXTURES.
- PRIOR TO ROUGH-IN AND FINAL CONNECTION, VERIFY ELECTRICAL CHARACTERISTICS AND EXACT LOCATION OF EQUIPMENT.
- GROUT AND SEAL ALL CONDUIT PENETRATIONS OF WALLS AND FLOOR SLABS TO PRESERVE FIRE RATING AND WATERTIGHT INTEGRITY.
- BRANCH CIRCUIT WIRING SHALL BE THHN/THWN INSULATION. PANEL FEEDERS SHALL BE TYPE XHHW. ALL WIRE SHALL BE COPPER. MINIMUM WIRE SIZE SHALL BE #12.
- ALL WIRING TO BE INSTALLED IN RACEWAYS. TYPE OF RACEWAY SHALL BE AS REQUIRED BY CODE. MINIMUM CONDUIT SIZE SHALL BE 1/2".
- PROVIDE CODE SIZED BOND WIRE IN ALL EMT, FLEXIBLE CONDUIT, OR NM CABLES.
- ALL ELECTRICAL EQUIPMENT SHALL BE NEW , U.L. APPROVED AND COMMERCIAL GRADE.
- WIRE RATED FOR 150° CENTIGRADE SHALL BE USED FOR ALL INCANDESCENT LIGHTING FIXTURES.
- ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST NATIONAL CODE, (N.E.C.), AND ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES.
- PROVIDE TYPEWRITTEN DESCRIPTIVE PANEL DIRECTORIES

OUTLET MOUNTING HEIGHTS PER AMERICAN DISABILITY ACT

ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE 2010 ADA SAD REQUIREMENTS FOR ALL SWITCHES, RECEPTACLES, TELE/DATA AND SIDE REACH CONTROL SWITCHES. ALL WALL CONTROLS, SWITCHES AND THERMOSTATS TO BE MOUNTED WITH TOP OF J-BOX AT 48" A.F.F. ALL ABOVE COUNTER CONTROLS, SWITCHES & OUTLETS TO BE MOUNTED WITH HORIZONTAL ORIENTATION WITH TOP OF J-BOX AT 44" A.F.F. ALL WALL OUTLETS TO BE MOUNTED AT 15" A.F.F. TO BOTTOM OF J-BOX.

SPECIAL REQUIREMENTS PER: THE FAIR HOUSING ACT.

ALL RECEPTACLES AT RESTROOM LAVATORIES TO BE GFCI TYPE. ALL WALL CONTROLS, SWITCHES AND THERMOSTATS TO BE MOUNTED WITH TOP OF J-BOX AT 48" A.F.F. ALL ABOVE COUNTER CONTROLS, SWITCHES & OUTLETS TO BE MOUNTED WITH HORIZONTAL ORIENTATION WITH TOP OF J-BOX AT 44" A.F.F. ALL WALL OUTLETS TO BE MOUNTED AT 15" A.F.F. TO BOTTOM OF J-BOX.

ONE LINE GENERAL NOTES.

- SYSTEM SHOWN IS A TWO TIER SERIES RATED SYSTEM 65/10K. MANUFACTURER SHALL PROVIDE A UL LISTED SYSTEM TO MATCH THIS RATING.
- MOTOR SHORT CIRCUIT CONTRIBUTION IS LESS THAN 1% OF SYSTEM SHORT CIRCUIT AMPS.
- NO DESIGN CHANGES MAY BE MADE TO THE SYSTEM WITHOUT THE PRIOR APPROVAL OF THE DESIGN ELECTRICAL ENGINEER AND THE ELECTRICAL INSPECTOR

ONE LINE KEYNOTES.

- PROVIDE A PERMANENT LABEL READING "THIS CIRCUIT BREAKER IS PART OF A SERIES RATED SYSTEM WITH DOWNSTREAM PANELS 42/10K. 65,000 AMPS AVAILABLE. IDENTIFIED REPLACEMENT COMPONENT REQUIRED"
- PROVIDE A PERMANENT LABEL READING "CAUTION-SERIES RATED SYSTEM 42/10, IDENTIFIED REPLACEMENT COMPONENTS REQUIRED"

NOTE:

- ALL SUB-PANELS, SERVICE EQUIPMENT, AND EQUIPMENT DISCONNECTS SHALL BE PROVIDED WITH THE WORKING CLEARANCES REQUIRED BY THE LATEST ADOPTED NEC.

SITE RELATED WORK

PRIOR TO COMMENSING WORK AND/OR SUBMITTING BASE BID THE CONTRACTOR SHALL VISIT THE SITE AND SATISFY HIMSELF TO EXISTING WORK RELATED CONDITIONS WITH REGARDS TO THE FOLLOWING:

- TRENCH AND BACKFILL FOR CONDUITS PER UTILITY CO. REQUIREMENTS. (FIELD VERIFY)
- TRANSFORMER MOUNTING PAD PER UTILITY CO. REQUIREMENTS.
- PROVIDE SECONDARY AND/OR PRIMARY CONDUITS. (SEE ONE LINE DIAGRAM).
- SERVICE ENTRANCE SECTION (SES). VERIFY PROPOSED EQUIPMENT WILL FIT THE SPACE ALLOTTED PRIOR TO ORDERING AND/OR CONSTRUCTION.
- P.V.C. TELEPHONE CONDUIT WITH PULL WIRE AND RIGID FACTORY STEEL BENDS PER TELEPHONE CO. REQUIREMENTS. (SIZE AS NOTED OR REQUIRED BY UTILITY VERIFY PRIOR TO INSTALLATION).
- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION AND COMPLIANCE WITH ALL UTILITY COMPANIES REQUIREMENTS, INCLUDING, BUT NOT LIMITED TO ANY AND ALL ADDITIONAL COSTS FOR MATERIAL AND LABOR FOR WORK WHETHER SHOWN ON THE PLANS OR NOT. ACTUAL ROUTING, CONDUIT, TRENCH AND PAD REQUIREMENTS SHALL BE AS SPECIFIED BY UTILITY COMPANIES. VERIFY REQUIREMENTS WITH UTILITIES PRIOR TO INSTALLATION.
- WHERE APPLICABLE, PROVIDE EQUIPMENT GROUNDING (BOND) CONDUCTOR FOR METALLIC PROCESSING AND FIRE SPROKLER PIPING PER NEC 250-80 AND SIZED PER NEC 250-95 TABLE.

FIRE ALARM SYSTEM SPECIFICATION

A COMPLETE OPERATIONAL MANUAL/AUTOMATIC FIRE ALARM SYSTEM TO BE MONITORED AS DIRECTED BY OWNER SHALL BE FURNISHED AND INSTALLED, AS REQUIRED FOR THIS TYPE OF BUILDING IN ACCORDANCE WITH STATE AND/OR LOCAL CODE AND AS APPROVED BY THE CODE ENFORCING AUTHORITY HAVING JURISDICTION. THE FIRE ALARM CONTROL PANEL SHALL BE LOCATED AS DIRECTED BY THE ENFORCING AUTHORITY. (CONNECT TO CIRCUIT LA-25). FIRE ALARM CONTRACTOR SHALL PROVIDE SPEC'S., DRAWINGS OF DEVICE LOCATIONS AND CUT SHEETS OF DEVICES TO FIRE MARSHALL FOR APPROVAL PRIOR TO INSTALLATION.

FAULT CURRENT CALC'S.

FAULT POINT PANEL 'LA'

$$f = \frac{1.732 \times 125' \times 49,505 \text{ A}}{11,174 \times 208\text{V}} = 4.61$$

$$M = \frac{1}{1 + 4.61} = .178$$

$$I_{sc} = 49,505\text{A} \times .178 = 8,811 \text{ AMPS}$$

FAULT POINT PANEL 'LB'

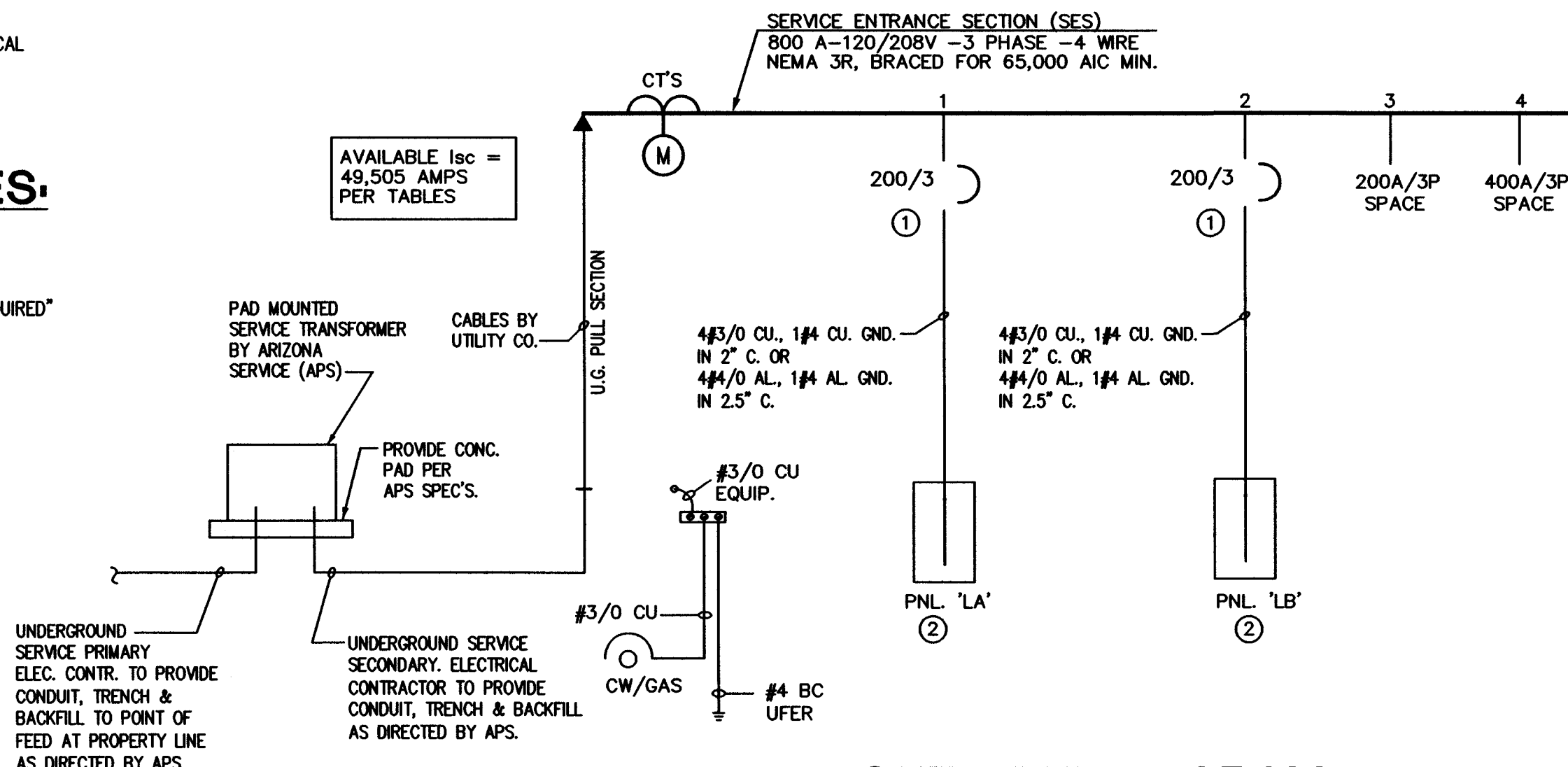
$$f = \frac{1.732 \times 35' \times 49,505 \text{ A}}{11,174 \times 208\text{V}} = 1.29$$

$$M = \frac{1}{1 + 1.29} = .436$$

$$I_{sc} = 49,505\text{A} \times .436 = 21,584 \text{ AMPS}$$

LOAD SUMMARY

PANEL 'LA' =	115.2 A	119.1 A	92.4 A
PANEL 'LB' =	19.8 A	19.8 A	19.2 A
PANEL 'LC' FUTURE =	-0- A	-0- A	-0- A
PANEL 'LD' FUTURE =	-0- A	-0- A	-0- A
SERVICE TOTAL (H1#) =	135.0 A	138.9 A	111.6 A



ONE LINE DIAGRAM

N.T.S.

PANELBOARD SYMBOLS

- ★ CONTINUOUS DUTY/LARGEST MOTOR Ⓢ 125K
- ◆ PROVIDE BREAKER W/ HANDLE "LOCK-ON" DEVICE
- ◆ CIRCUIT W/ TIMECLOCK
- ▲ CIRCUIT W/ PHOTOCELL

PANELBOARD LA SCHEDULE

MAINS: 200A MLO	LOAD-VA	LOCATION: SEE PLAN
VOLTAGE: 120/208V, 3# 4W		MOUNTING: SURFACE
TYPE: EATON, GE, SQ. D OR EQUAL		MIN. A.I.C.: 22/10K SERIES RATED
CIRCUIT DESCRIPTION	BKR. NO.	CIRCUIT DESCRIPTION
LIGHTS - ASSEMBLY AREA	20 1	RECEPT'S. - ELEC. DRINKING FOUNTAIN
	3	WOMENS RR, & ASSEMBLY
	5	ASSEMBLY
	7	MENS RR & BREAK ROOM
	9	OFFICE 106 & 107
	11	OFFICE 107 & 108
RESTROOMS OFFICE & BREAK RM.	13	LANDSCAPE TC & MEZZ.
UPPER LEVEL MEZZ.	15	BREAK RM. COUNTER
EXTERIOR BLDG. & POLE FIXTURES	17	BREAK RM. GARBAGE DISP.
SPARE	19	BREAK RM. COUNTER
SPARE	21	BREAK RM. MICROWAVE
SPARE	23	BREAK RM. MICROWAVE
FIRE ALARM SYSTEM PANEL	25	BREAK RM. REFRIGERATOR
FIRE RISER ROOM ELEC. WALL HEATER	27	BREAK RM. REFRIGERATOR
ELECTRIC GARAGE DOOR OPENER	29	SPARE
ELECTRIC GARAGE DOOR OPENER	31	FURNACE F-1 3/4 HP, 120V, 1#
UNIT HEATER UH-1	33	A/C UNIT CONDENSING UNIT CU-1
UNIT HEATER UH-1	35	18.0 MCA, 208V, 1#
SPACE	37	ELECTRIC WATER HEATER
SPACE	39	4.5 KW, 208V, 1#
SPACE	41	SPACE
	43	
TOTAL LOAD PER PHASE:	13826 14287 11087	H# 14287 / 120 = 119.1 AMPS

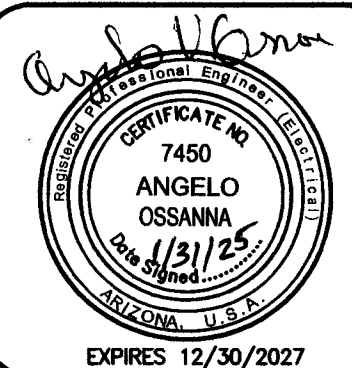
PANELBOARD LB SCHEDULE

MAINS: 200A MLO	LOAD-VA	LOCATION: SEE PLAN
VOLTAGE: 120/208V, 3# 4W		MOUNTING: SURFACE
TYPE: EATON, GE, SQ. D OR EQUAL		MIN. A.I.C.: 22/10K SERIES RATED
CIRCUIT DESCRIPTION	BKR. NO.	CIRCUIT DESCRIPTION
RECEPT'S. - ASSEMBLY	20 1	UNIT HEATER UH-1
	3	UNIT HEATER UH-1
	5	UNIT HEATER UH-1
	7	UNIT HEATER UH-1
	9	UNIT HEATER UH-1
	11	ELECTRIC GARAGE DOOR OPENER
HEAT TAPE FOR BACK FLOW PREVENTER	13	SPARE
SPARE	15	SPARE
SPARE	17	SPARE
SPACE	19	SPACE
	21	
	23	
	25	
	27	
	29	
	31	
	33	
	35	
	37	
	39	
	41	
	43	
TOTAL LOAD PER PHASE:	2380 2380 2300	H# 2380 / 120V = 19.8 AMPS

ELECTRICAL DESIGN & CADD SERVICES INC.
1600 LAMB LANE
PRESCOTT, AZ. 86305
PH: (928) 776-4800
CELL: (928) 420-1200
E-MAIL: archie@elecdesign.net

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.
P.O. Box 11593
Prescott, AZ 86304
P 928-443-5812
F 928-443-5815
email: waka@cableone.net
www.kenson-associates.com
ARCHITECTURE & PLANNING

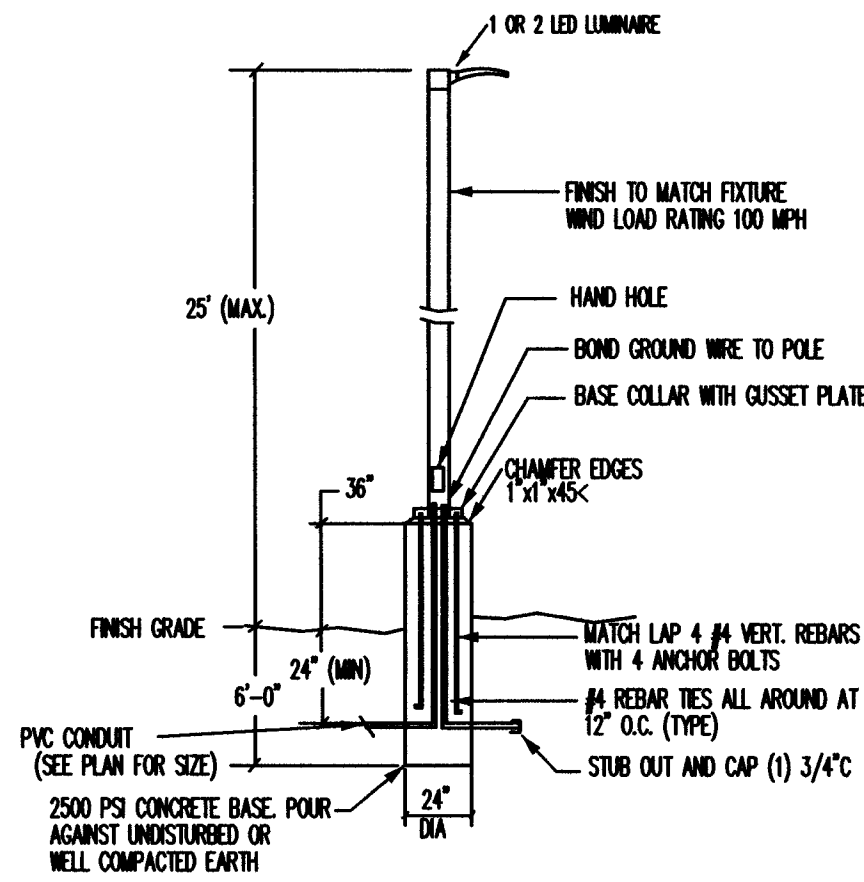
DRAWING: Electrical Symbols, Specifications, One-Line Diagram, Panel Schedules & Notes

PROJECT: European Techniques 7
6886 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY
R.A.
CHECKED BY
A.O.
DATE
November 12th, 2024
JOB NO.
803
SHEET

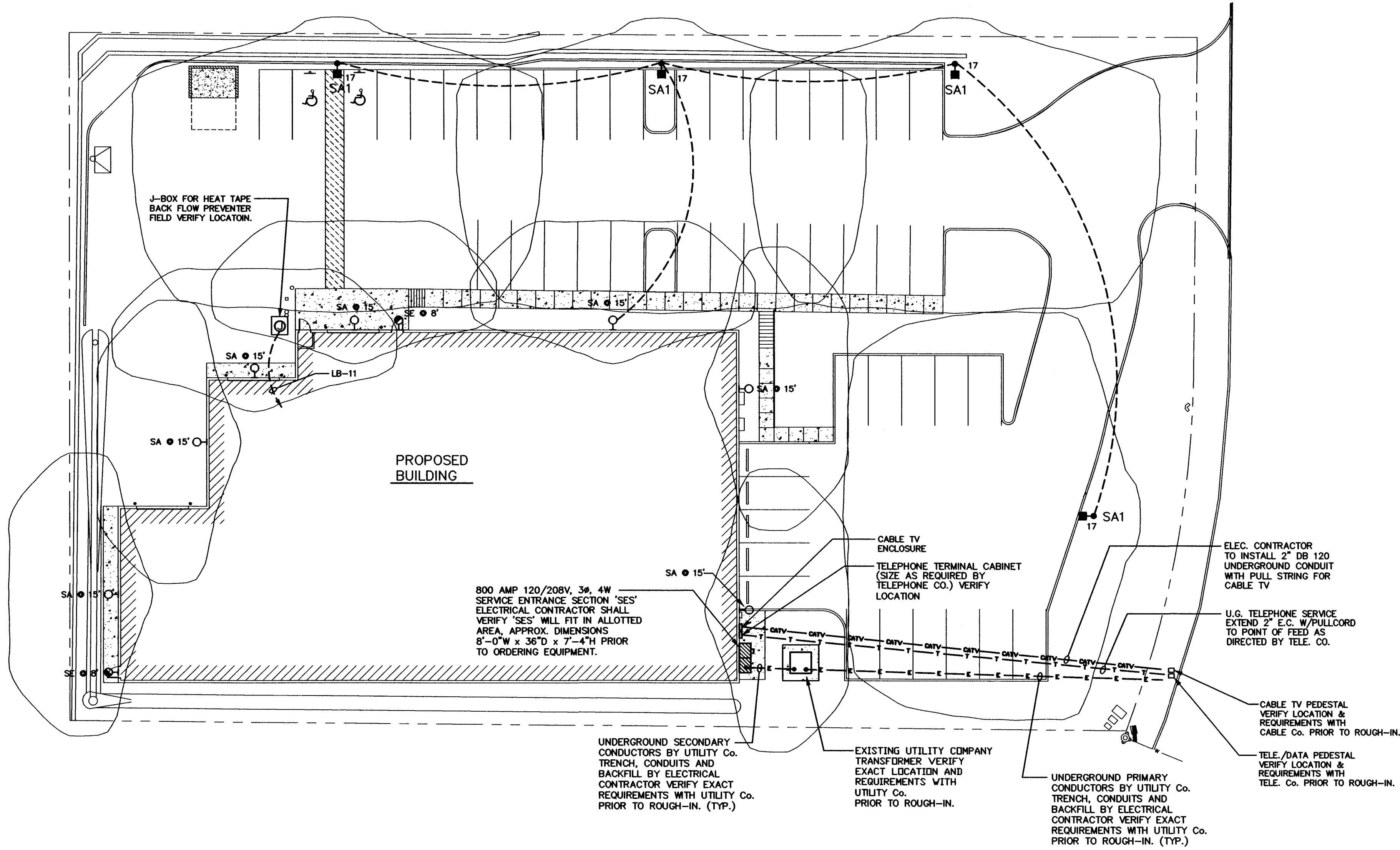
E1.0



TYPE 'SA1' POLE MOUNTING DETAIL

NO SCALE
NOTE:
CONTRACTOR TO VERIFY FIXTURE POLE TYPE, HEIGHT AND
ANY OTHER REQUIREMENT WITH OWNER/ARCHITECT PRIOR TO ORDERING.

NOTE: POLE BASE DEPTH, REBAR QUANTITIES AND SIZES ARE SHOWN FOR ESTIMATION PURPOSES ONLY. THE CONTRACTOR SHALL PROVIDE A POLE BASE INSTALLATION DETAIL PREPARED & SEALED BY A STRUCTURAL ENGINEER WITH EXACT POLE BASE DIMENSIONS, MATERIALS, ETC. POLES AND POLE BASES SHALL BE DESIGNED FOR PROPER STRUCTURAL AND WIND LOADING SUPPORT SPECIFIC FOR THE FIXTURES AND POLES BEING PROVIDED FOR THIS PROJECT.



Electrical Site Plan

Scale: 1"=20'-0"



NOTE:
TIME CLOCK SHALL BE SEVEN
DAY, PROGRAMMABLE,
8-CIRCUIT MIN. W/BATTERY
BACK-UP. SET EACH INDIVIDUAL
CIRCUIT AS DIRECTED BY
ARCHITECT/OWNER.

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PROPERTY LINE - FC @ GRADE	✕	0.2 fc	0.9 fc	0.0 fc	N/A	N/A
SITE - FC @ GRADE	+	1.6 fc	3.2 fc	0.3 fc	10.7:1	5.3:1

Schedule											
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Filename	Lumens Per Lamp	Lumen Multiplier	Light Loss Factor	Wattage
OH	SA	7	LITHONIA LIGHTING	WDGE2 LED P4 30K 80CRI T3M MVOLT SRM (FINISH)	WALL MOUNT WITH P4 PERFORMANCE PACKAGE - TYPE 3M	LED - 3000K	WDGE2_LED_P4_30K_80CRI_T3M.ies	4065	1	0.91	46.6589
SA1	SA1	4	LITHONIA LIGHTING	DSX0 LED P6 30K 80CRI T1FM MVOLT SPA HS (FINISH) / SSS 22'-0" W/36" BASE	AREA LUMINAIRE WITH P6 PERFORMANCE PACKAGE - TYPE FTM WITH HOUSESIDE SHIELD	LED - 3000K	DSX0_LED_P6_30K_80CRI_T1FM_HS.ies	12791	1	0.91	137
SE	SE	2	EELP	ODEL 10W W EM (FINISH) CW2	WALL MOUNT EMERGENCY FIXTURE	LED - 3200K	ODEL.ies	494	1	0	10.7

ELECTRICAL DESIGN & CADD SERVICES INC.
1600 LAMB LANE
PRESCOTT, AZ. 86305
PH: (928) 776-4900
CELL: (928) 436-1200
E-MAIL: archie@elecdesign.net

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.

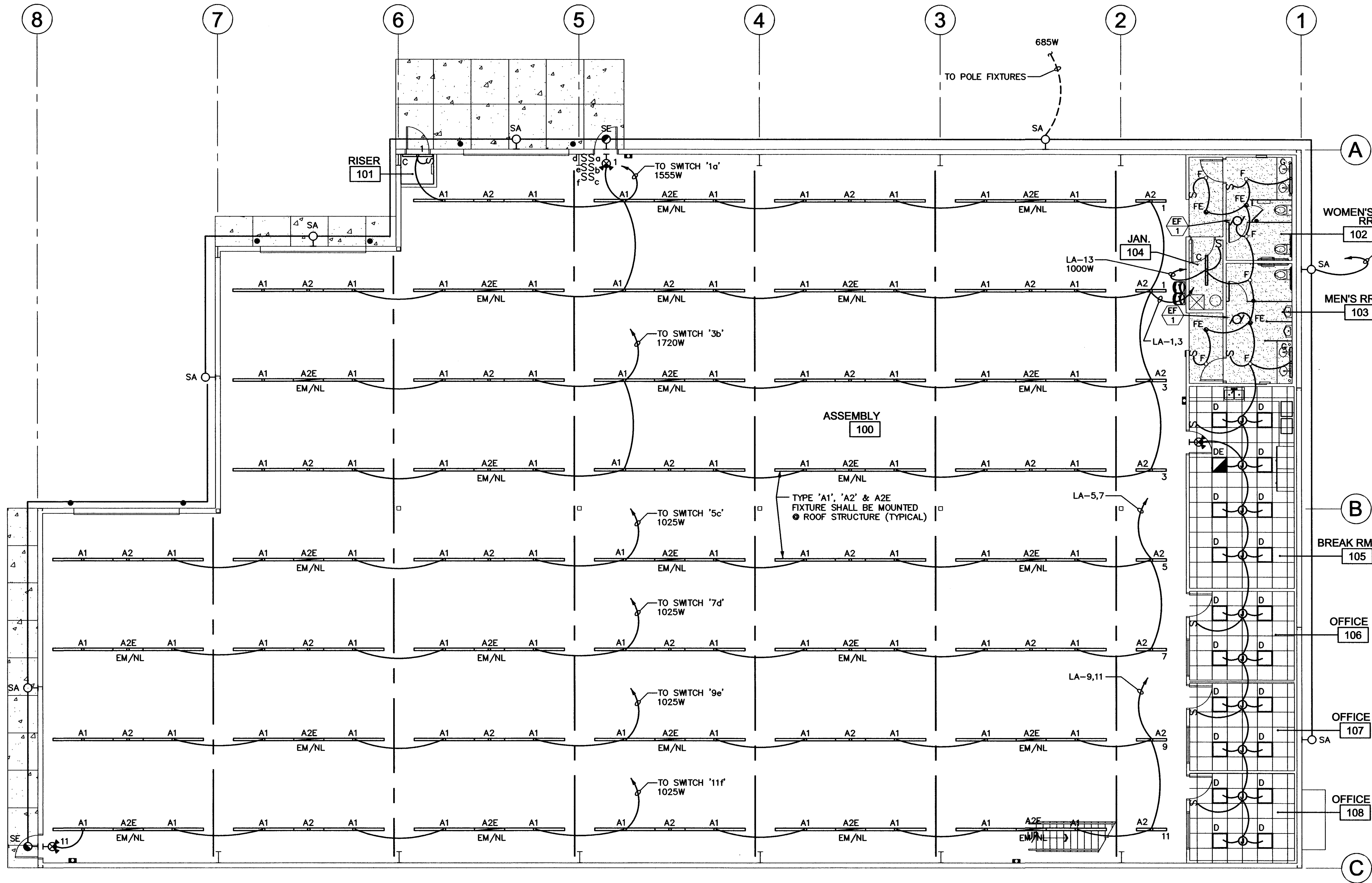


W. Alan Kenson & Associates, P.C.
P.O. Box 11593
Prescott, AZ 86304
P 928-443-5812
F 928-443-5815
email: waka@cablone.net
www.kenson-associates.com
ARCHITECTURE & PLANNING

DRAWING: Electrical Site Plan
PROJECT: European Techniques 7
8886 Inter Cal Way
Prescott, AZ
APN: 103-50-019

DRAWN BY: R.A.
CHECKED BY: A.O.
DATE: November 12th, 2024
JOB NO.: 803
SHEET:

E1.1



Lighting Floor Plan

Scale: 1/8"=1'-0"



Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
FABRICATION - FC @ 36" AFF	+	44 fc	55 fc	20 fc	2.8:1	2.2:1
MEZZANINE - FC @ FLOOR	+	25 fc	38 fc	13 fc	2.9:1	1.9:1
OFFICES - FC @ 2.5' AFF	+	51 fc	68 fc	33 fc	2.1:1	1.5:1
RESTROOMS & STORAGE - FC @ FLOOR	+	19 fc	30 fc	9 fc	3.3:1	2.1:1

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
MEZZANINE - EMERGENCY LIGHTING	+	1.6 fc	7.9 fc	0.1 fc	79.0:1	16.0:1
OFFICES - EMERGENCY LIGHTING	+	2.1 fc	8.7 fc	0.2 fc	43.5:1	10.5:1
RESTROOMS - EMERGENCY LIGHTING	+	5.0 fc	10.5 fc	1.1 fc	9.5:1	4.5:1
EMERGENCY LIGHTING	+	1.3 fc	1.8 fc	0.1 fc	18.0:1	13.0:1

Symbol	Label	Manufacturer	Catalog Number	Description	Lamp	Filename	Lumens Per Lamp	Lumen Multiplier	Light Loss Factor	Wattage
—	A1	LITETRONICS	VT30US840P (MOUNTING)	8' LED VAPOR TIGHT STRIP	LED - 4000K	VT30US840P-IES.IES	7610	1	0.91	52.6355
—	A2	LITETRONICS	VT30US440P (MOUNTING)	4' LED VAPOR TIGHT STRIP	LED - 4000K	VT30US440P-IES.IES	3853	1	0.91	28.9
—	A2E	LITETRONICS	VT30US440P (MOUNTING)	4' LED VAPOR TIGHT STRIP	LED - 4000K	VT30US440P-IES.IES	3853	1	0.91	28.9
—	B	LITHONIA LIGHTING	CLX L48 7000LM SEF FDL MVOLT G210 40K 80CR WH	4' SUSPENDED LINEAR	LED - 4000K	CLX_L48_7000LM_SEF_FDL_MVOLT_40K_80 CR.ies	7155	1	0.91	46.6111
—	BE	LITHONIA LIGHTING	CLX L48 7000LM SEF FDL MVOLT G210 40K 80CR WH	4' SUSPENDED LINEAR	LED - 4000K	CLX_L48_7000LM_SEF_FDL_MVOLT_40K_80 CR.ies	7155	1	0.91	46.6111
—	C	LITHONIA LIGHTING	CLX L48 4000LM SEF FDL MVOLT G210 40K 80CR WH	4' SURFACE MOUNTED LINEAR	LED - 4000K	CLX_L48_4000LM_SEF_FDL_MVOLT_40K_80 CR.ies	3955	1	0.91	25.5429
□	D	LITHONIA LIGHTING	CPX 2X2 3200LM 80 35K SML MIN10 Z 2X2 FLAT PANEL MVOLT	2'X2' FLAT PANEL	LED - 3500K	CPX_2X2_3200LM_80_35K_SML_MIN10_Z 2X2_FLAT_PANEL_MVOLT.ies	3668	1	0.91	30.1
▣	DE	LITHONIA LIGHTING	CPX 2X2 3200LM 80 35K SML MIN10 Z 2X2 FLAT PANEL MVOLT	2'X2' FLAT PANEL	LED - 3500K	CPX_2X2_3200LM_80_35K_SML_MIN10_Z 2X2_FLAT_PANEL_MVOLT.ies	3668	1	0.91	30.1
○	F	LITHONIA LIGHTING	LDN6 35/10 L06AR LSS MVOLT G210	6" DOWNLIGHT	LED - 3500K	LDN6_35_10_L06AR_L SS.ies	938	1	0.91	10.44
●	FE	LITHONIA LIGHTING	LDN6 35/10 L06AR LSS MVOLT G210	6" DOWNLIGHT	LED - 3500K	LDN6_35_10_L06AR_L SS.ies	938	1	0.91	10.44
—	G	LITHONIA LIGHTING	WL4 20L G210 LP835	4' WALL MOUNT	LED - 3500K	WL4_20L_LP835.ies	2152	1	0.91	18.7

Mezz. Lighting Floor Plan

Scale: 1/8"=1'-0"



GENERAL LIGHTING NOTES:

- IF ELECTRICAL CONTRACTOR IS NOT CERTAIN OF MOUNTING HEIGHT OR LOCATION OF ANY LIGHTING FIXTURES OR SWITCHES HE IS TO VERIFY ITEMS WITH ELECTRICAL ENG., ARCHITECT OR OWNER PRIOR TO ROUGH-IN.
- NIGHT LIGHTS (NL), EMERGENCY & EXIT LIGHT FIXTURES SHALL BE CONNECTED TO UNSWITCHED LEG OF CIRCUIT.
- ALL CONDUIT IN ASSEMBLY AREA SHALL BE SURFACE MOUNTED VERIFY REQUIREMENTS.

ELECTRICAL DESIGN & CADD SERVICES INC.
1600 LAMB LANE
PRESCOTT, AZ. 86305
PH: (928) 778-4900
CELL: (928) 420-1200
E-MAIL: archie@elecdesign.net

REVISIONS

BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.

ANGEL OSSI
7450
ANGEL OSSI
1/21/25
EXPIRES 12/30/2027

W. Alan Kenson & Associates, P.C.

P 928-443-5812
F 928-443-5815
email: waka@cableone.net
www.kenson-associates.com

ARCHITECTURE & PLANNING

DRAWING: Electrical Lighting Floor Plan

PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ

APN: 103-50-019

DRAWN BY
R.A.

CHECKED BY
A.O.

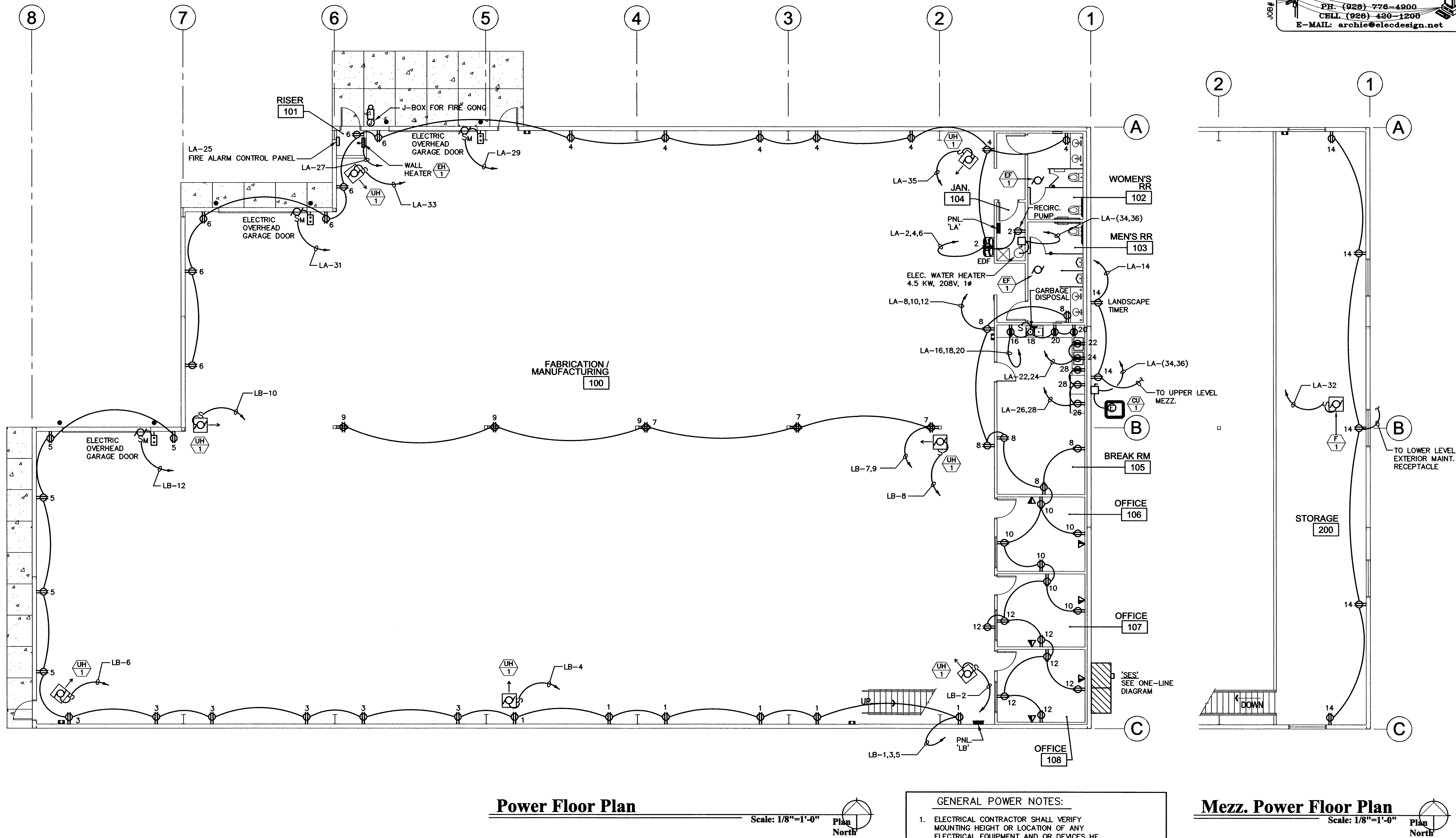
DATE
November 12th, 2024

JOB NO.
803

SHEET

E1.2

Jan 31, 2025 - 12:12pm



ELECTRICAL DESIGN & CADD SERVICES INC.
1600 LAMB LANE
PRESCOTT, AZ. 86305
PH: (928) 778-4900
CELL: (928) 420-1200
E-MAIL: archie@elecdesign.net

REVISIONS	BY

These drawings are the property of W. Alan Kenson & Associates P.C., and may not be reproduced in any way without the written consent of W. Alan Kenson & Associates, P.C.



W. Alan Kenson & Associates, P.C.
P.O. Box 11593
Prescott, AZ 86304
P 928-443-5812
F 928-443-5815
email: waka@cableone.net
www.kenson-associates.com
ARCHITECTURE & PLANNING

DRAWING: Electrical Power Floor Plan
PROJECT: European Techniques 7
6686 Inter Cal Way
Prescott, AZ
APN: 103-50-019

DRAWN BY R.A.
CHECKED BY A.O.
DATE November 12th, 2024
JOB NO. 803
SHEET

E1.3

- GENERAL POWER NOTES:**
1. ELECTRICAL CONTRACTOR SHALL VERIFY MOUNTING HEIGHT OR LOCATION OF ANY ELECTRICAL EQUIPMENT AND OR DEVICES HE IS TO VERIFY ITEMS WITH ELECTRICAL ENGINEER, ARCHITECT OR OWNER PRIOR TO ROUGH-IN.
 2. ALL RECEPTACLES AT RESTROOM LAVATORIES TO BE GFCI TYPE INSTALLED AT +42" A.F.F.
 3. ALL RECEPTACLES IN AREAS WITHIN 6'-0" OF A SINK SHALL BE GFCI TYPE PER NEC
 4. EXTERIOR & ROOF MOUNTED MAINT. RECEPT'S. SHALL BE WP, GFCI TYPE PER NEC
 5. VERIFY THE EXACT LOCATIONS OF ALL TELEPHONE OUTLETS, DATA OUTLETS AND SPECIAL SYSTEMS OUTLETS WITH THE ARCHITECT/OWNER PRIOR TO ROUGH-IN.
 6. ELECTRICAL CONTRACTOR SHALL VERIFY MECHANICAL EQUIPMENT REQUIREMENTS BREAKER, DISC. & WIRE SIZE WITH MANUFACTURER PRIOR TO ROUGH-IN.
 8. ELECTRICAL CONTRACTOR IS APPROVED TO USE SURFACE MOUNTED RECEPTACLES & CONDUIT IN WAREHOUSE VERIFY PRIOR TO ROUGH-IN.
 9. ALL RECEPTACLES IN THE WAREHOUSE TO BE INSTALLED AT +48" A.F.F. GFCI TYPE.